

COCCIDIOSIS IN A TAWNY FROGMOUTH (*Podargus strigoides*) (CASE 4469.1)

CASE HISTORY

Subadult male tawny frogmouth (*Podargus strigoides*) passed on to a wildlife shelter for hand raising. Noticed a lack of physical development (size) during the last month. Started falling off perch and toppling onto head on and very unbalanced. Very thin despite eating well right up until it died. NPWS has seen similar symptoms in another 5 birds that have also died. 3 of these birds also regurgitated prior to death. All of the dead birds also had flat flies.

GROSS PATHOLOGY

External findings: Thin. Urate stained vent. Flat flies.

Hydration: moderate dehydration, **Fat deposits:** depleted, **Muscle mass:** normal

Internal findings: Cardio respiratory tract - no gross findings. Gizzard, moderate content of woodchips. Small intestine, low volume of normal contents. Gall bladder, kidney, adrenal and spleen are all grossly normal. Caeca both distended with loose brown content. Right lobe of liver has pale tan area along caudal margin. Immature male.

HISTOPATHOLOGY

No abnormalities detected in: kidney, ventriculus, proventriculus, heart, cloaca, oesophagus, spleen, pancreas

Adrenal: Hyperplasia of cortical cells.

Small intestine: Coccidial forms near tips and within lumen. Segment of small intestine with extensive bloom of all coccidian stages, mostly intracellular with shizonts, micro and macrogamonts and oocysts.

Large intestine: Some luminal coccidian forms.

Liver: Multifocal mild lipidosis.

Muscle: Moderate myofiber atrophy.

Lung: Oropharynx within normal limits.

Brain: Within normal limits.

BACTERIOLOGY

CAECUM

Wet prep: Coccidia 2+

Culture: No enteric pathogens

LIVER

Culture: 2+ *Providencia rettgeri*

MORPHOLOGICAL DIAGNOSIS

Severe intestinal coccidiosis

Multifocal mild hepatic lipidosis

Muscle atrophy

Foreign body, ventricular wood chip ingestion (gross finding)
Inanition

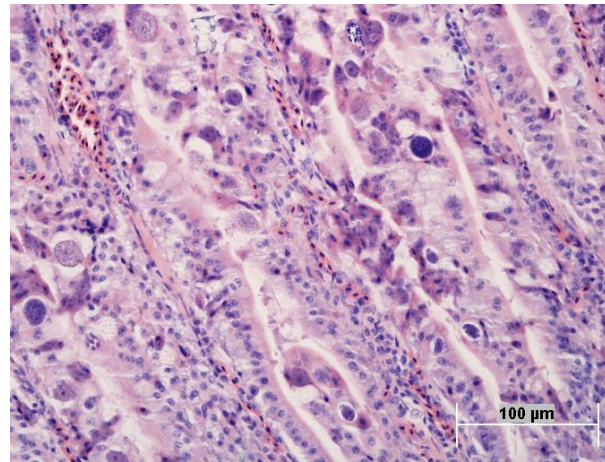


Fig 1. Small Intestine. H&E

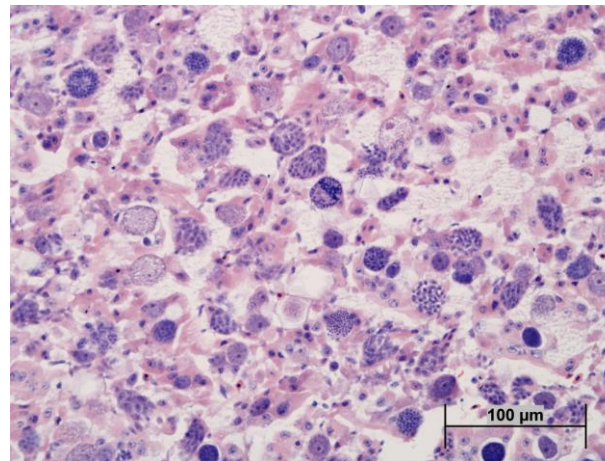


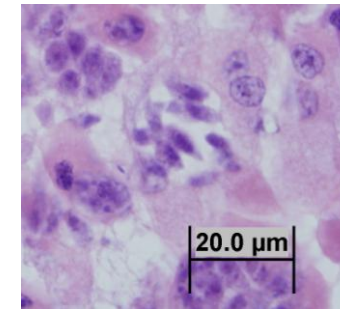
Fig 2. Small Intestine, H&E

COMMENTS

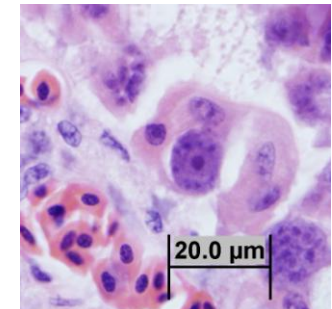
This young male tawny frog mouth from Pymble was passed on to a wildlife shelter for hand raising. The bird appeared thin and stunted. It became weak and regurgitated its food and died, and was referred to TZ for pathology studies.

At necropsy the bird was very thin and had wood chips in its ventriculus and its caeca were distended. A direct smear of intestinal contents contained numerous coccidia forms. Histologically a myriad of coccidian forms were evident in a segment of small intestine; other segments of the small intestine had less coccidian forms and caecum and large intestine had few forms.

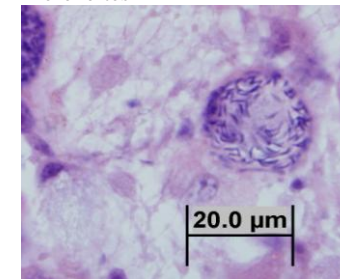
Clinical coccidiosis in tawny frogmouth has not been commonly observed. Another coccidiosis case occurred recently (4451.1) in a young female tawny frogmouth from Seaforth with similar clinical signs. Similar clinical cases in three other tawny frogmouths were also noted by NPWS staff submitting this case but no material was available.



Merozoites



Macrogamete



Microgametes



Oocyst (arrow)

Fig 3. Several coccidial life stages. H&E 100x

REFERENCES

<http://www.saxonet.de/coccidia/cycle.htm>

<http://biology.unm.edu/biology/coccidia/home.html>