

Hygiene Protocols for the Prevention
and Control of Diseases
(Particularly Beak and Feather Disease)
in Australian Birds

Full Checklist for the
Clinical Evaluation of Captive Birds



Australian Government

Department of the Environment and Heritage

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Note

This document describes a Full Checklist for the Clinical Evaluation of Captive Birds, and has been developed with the involvement and cooperation of a broad range of stakeholders, but the making of this document does not necessarily indicate the commitment of individual stakeholders to undertaking any specific actions. The attainment of objectives and the provision of funds may be subject to budgetary and other constraints affecting the parties involved. Proposed actions may be subject to modification over the life of the document due to changes in knowledge.

Full Checklist for Clinical Evaluation of Captive Birds.

History

Aviary History

- Is the floor gravel, sand, dirt or concrete?
- Are perches dowel, natural or other?
- Is the bird in a suspended cage?
- Is the wire stainless steel, galvanised, nylon mesh, or other?
- How old is the aviary? Does the metal show signs of weathering?
- How often is the floor of the aviary cleaned or changed?
- Contact with wild birds?
- Is the aviary pest (rodent, insect) and predator (rodent, snake) proof?

Social History

- Reproductive status?
- Captive bred or wild caught?
- Hand reared?
- Number in aviary?
- Time in captivity?
- Tame, timid or aggressive?

Nutritional History

- Food and water dishes cleaned daily?
- Are the feeding and watering receptacles metal, plastic or ceramic?
- How often are food and water changed?
- Is the bird eating?
- Has the diet been changed recently?
- Dietary components – seed, natural or commercial
- Water source – rain, dam, tank, town, chlorinated, fluoridated?
- Are water pipes copper, galvanised or plastic?
- Food storage: temperature, humidity, length of time
- Food preparation - hygiene

Visual Examination in Aviary (if possible)

- Are feathers normal?
- Are feathers missing? Pbfd
- Is the bird bright, alert and responsive?
- Is the bird fluffed-up or listless and sleepy - indication of illness.
- Is the bird coughing, sneezing, vomiting?
- Is there an eye (ocular) discharge? A nasal discharge?
- Is the bird tail-bobbing or mouth-breathing (respiratory effort)?

Droppings

- The amount of faeces is determined by feed intake
- Are the urates white or discoloured (off-white, green?) Budgerigars defaecate 20-50, and sulphur-crested cockatoos 8-12 times a day.
- Diet determines appearance
- Fruit and vegetables in diet can increase the size of the dropping, or increase/discolour the urine content
- Seed diet - formed green stool
- Formulated diet - a larger stool with more water. If food is coloured, faeces will be that colour. A bird may eat only one colour (usually red). More urine on formulated diet - drinks more water
- Fruit/vegetables - colour - more watery droppings
- Blood - abnormal. If there is blood, is it clotted, on the surface of the faeces, or mixed with faeces? Cloacal papillomas?
- Size. Usually big one first thing in the morning. If large droppings persist during the day, a problem
- Fewer and larger droppings when female is in a reproductive cycle - oviduct presses on intestine.
- Undigested food - abnormal
- Watery urine - excess greens, heavy metal poisoning
- Watery faecal portion - enteritis
- Urine: blood - heavy metal intoxication?

Clinical examination involves a systematic head-to-toe approach

Physical Examination

- Assess body mass
- Evaluate pectorals
- A bird in good body condition has a rounded, firm pectoral muscle and minimal subcutaneous fat
- A thin bird has a prominent keel and wasted pectorals.
- Fat birds often have large fat pads over pectorals and protruding abdomens
- Get *everything* you will need ready *before* capture and perform the examination in a closed, small, uncluttered room with no clear windows and all fans turned off. Dim the lights for diurnal species and use bright lights for nocturnal species.
- Always have a net ready to capture escapees

Feathers and Skin

- Feathers should be smooth, shiny and clean with normal colouration.
- Small clots of blood may matt feathers together and obscure small puncture wounds below.
- Presence of mites, lice: hold wings extended, up to light to check for mites and eggs within the feather vanes (may need slight magnification aid).
- Powder down should be present, large amounts will be produced by the cockatoos.
- Missing groups of feathers or misshapen feathers indicates PBFD or APV infection.
- Presence of mites, lice
- Check skin for evidence of burning (eg, electrocution)
- The keel is vulnerable to trauma, acute or chronic.

The Head and Neck

- Check skull for bruising, lacerations
- Eyes clear, moist, shining, symmetrical, centred
- Iris muscle striated and partially under voluntary control
- The eyes, sinuses and nasal cavity are all related anatomically, so infection of one may involve all three.
- There should be no discharges from the eyes, nostrils or choanal slit. Swellings and feather loss around the eye may indicate sinusitis
- Check for the presence of mites in the trachea using a bright light through the stretched skin of the neck. May also indicate if the trachea is congested or contains fluid
- Beak should be healthy and shiny, but covered by powder down in those species that produce it
- Beak abnormalities are common, usually asymmetry or abnormal length are seen: upper/lower length; overgrown side; crossed beak; grooves; cracks, necrosis. Psittacine beaks should be covered in powder down
- Maxillary and mandibular portions of beak should meet evenly
- A sticky, matted head indicates vomiting
- Open beak and inspect oral cavity: tongue, choana, and glottis
- Inspect ears for signs of discharge, polyps, tumours, parasites or erythema
- Palpate the neck for neck injuries, oesophageal fistulae. Staining of feathers may be the only evidence of a neck wound.
- The crop should have soft fluctuant contents. Look for crop fistula.

The Limbs

- Extend wings to check for normal colour, range of movement, masses, feather picking, fractures and luxation.
- Should be equal length and carried evenly and correctly.
- Lice and mites. Do not forget to examine joints
- Extend legs and check grasp (if bird is alive), range of movement, masses, feather picking, fractures and luxation.
- Check skin of legs.
 - ▶ Excessive scalliness is associated with nutritional deficiency,
 - ▶ Honeycomb-like lesions and tassel-foot indicate *Cnemidocoptes* spp (scaly leg and face mite).
 - ▶ Leg bands – bands can be open or closed
 - ▶ Plantar aspect of foot - bumblefoot
 - ▶ Trauma

The Pectoral area and Abdomen

- Should be flat, forming part of a continuous curve with the keel bone.
- If the abdomen is enlarged, it could be fluid or a solid mass
- Palpate from the side, especially if egg bound, to avoid life threatening compression of the caudal *Vena Cava*.
- Eggs, neoplastic masses and fluid can be palpated.
- Examine preen gland at base of tail in those species that have a preen gland

Cloacal Examination

- The cloaca should be clean. Pasting of the vent is due to diarrhoea or may be associated with leg weakness, obesity, severe generalised weakness or abdominal masses.
- Checking for cloacal papillomas is most important when examining the South American spp such as macaws, amazons and toucans.