

AVIAN MANGE MITE COLLECTION



Wildlife Investigations Laboratory, California Department of Fish and Wildlife School of Veterinary Medicine, University of California, Davis *FEDERAL AND STATE PERMITS MAY BE REQUIRED FOR SAMPLE OR CARCASS COLLECTION*

IMPORTANT: Contact Krysta Rogers with CDFW <u>before</u> sample collection to ensure samples can be received.

Live birds

For **live birds**, because the skin is so thin, a **scalpel blade** (size 10, 20, or 22; Fig. 1) is only recommended for scraping if the person performing the scraping has prior experience. To reduce chances of cutting into the bird's skin, the scalpel blade may be dulled by repeatedly scraping the blade's edge on a hard surface. Alternatively, use a laboratory **small steel spatula** (Fig. 2a & b) or other tool with a duller edge. Scrape gently across the skin, do not cut or dig in to the skin.



Lesions in birds typically occur around the **bill and eyes, lower legs and feet, or lower abdomen**. Lesions may appear as dry, flaky or crusty skin, raised and thickened skin, usually featherless, possibly with inflammation and exudate.

If there are large crusts, scrape them with the scalpel blade or steel spatula to get a representative sample. If the crusts are easily removed, collect several samples into vials; forceps or tweezers may aid in collection of crusts.

If it is very thin crust or just appears to be flaky skin then scrape the area very gently. If there are no obvious lesions, the scraping should be done under the lower bill (chin) (Fig. 3), the commissure of the bill (Fig. 4), lower legs where the feathering typically begins (Fig. 5 & 6a) or the dorsal tarsus at the ankle joint (Fig. 6b), and/or lower abdomen (Fig. 7).

Deposit the specimens (mites and debris) into a snap-cap tube or other plastic vial containing sterile 0.9% sodium chloride (saline). Specimens from different locations on the body should be collected into separate vials appropriately labeled. Include on the vial label: bird species (common name), animal identification number, date, and location of scraping (e.g. face, leg, or abdomen).

Store sampled saline vials in the refrigerator or freezer until submission; submit vials to the laboratory within a few days to a week. Submit a copy of the bird's intake form or other datasheet with the samples, which includes the date and location where the bird was found.

SOP: Mange mite collection JE Foley – original 2/6/14 KH Rogers – modified 10/30/15



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Nest material

Collect a handful (roughly 1 cup) of nest material into a zip-lock bag or other plastic bag; seal the bag to ensure the contents remain in the bag. The nest material collected should consist primarily of soft materials, such as vegetation, molted feathers, and small pieces of woody debris.

Ideally, nest material samples should be shipped overnight to the laboratory immediately after collection. If this is not possible, nest material samples should be stored at room temperature and shipped to the lab as soon as possible. Submit copy of the bird's intake form or other datasheet with the samples, which includes the date and location where the nest was located.

Carcasses

Collect carcass into an individual plastic bag and seal the bag closed. Notify Krysta Rogers at the Wildlife Investigations Lab (WIL) immediately to determine shipment options. If carcass will be shipped to WIL within 72 hours after collection, carcass should be stored in the refrigerator. If carcass will be shipped to WIL after 72 hours after collection, carcass should be stored in the freezer. Ship carcasses overnight to WIL between Monday and Thursday.

Laboratory information *FEDERAL AND STATE PERMITS MAY BE REQUIRED FOR SAMPLE OR CARCASS COLLECTION*

Mite samples (vials & nest material):	For questions, supplies, shipments & carcasses:
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