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**TARSAL ANOMALY FOUND IN AN ADULT AGABUS SERIATUS
(COLEOPTERA: DYTISCIDAE)**J.L. Snitgen¹**ABSTRACT**

An adult specimen of *Agabus seriatus*, possessing two complete sets of tarsal claws on the left mesotarsus, was collected from a small stream in northeastern Wisconsin.

An adult specimen of *Agabus seriatus* (Say) was collected in a benthos sample from Silver Creek, a second order stream in Brown County, Wisconsin. The sample was collected during a 2000 baseline qualitative study conducted by Oneida Tribe of Indians Water Resources staff. The anomaly, located on the left mesotarsus (Fig. 1) was discovered while identifying the specimen. Although deformities of chironomid menta due to heavy metals and other contaminants are well documented (Diggins and Stewart 1993, Warwick 1988) and deformities and arrested development have been produced in terrestrial insects due to exposures with pesticides (Arthur 2001), a literature search produced no published records describing this type of anomaly. Personal communications with coleopteran workers indicated this type of anomaly has not been encountered previously.

This species is common in the southern third of Wisconsin, uncommon in the northern two-thirds. They are collected most often from lotic habitats, especially small, spring-fed streams (Hilsenhoff 1993). The beetles usually occur on mineral substrates such as clay, sand or gravel but may also be in clumps or mats of vegetation in or at the edge of flowing water. Beetles seldom occur in depositional areas or on silty or peaty substrates (Larson et al. 2000). Both larvae and adults within this genus are predators, mainly on other aquatic arthropods; adults are also scavengers (Hilsenhoff, 1995).

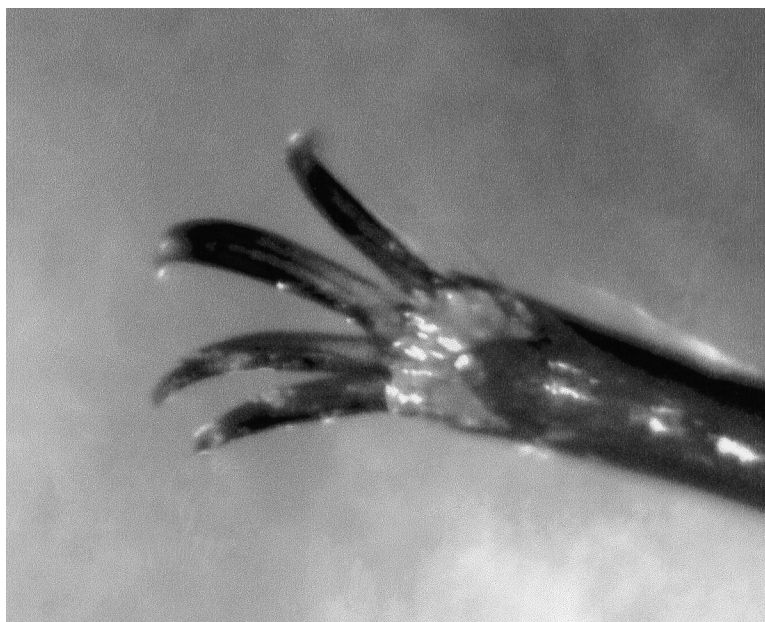
Sampling of aquatic invertebrates was performed at the site as part of an Oneida Reservation-wide baseline study of various streams and lakes to eventually develop biocriteria for Tribal Water Quality Standards. Sampling was performed using an aquatic dip net (traveling kicks and sweeps of aquatic vegetation and undercut banks), and hand held examination and scrubbing of stones and partially decayed wood within the sample area. Substrates were sampled so that aquatic invertebrates from all of the significant microhabitats within the sample were represented in the composite sample of the site (Oneida Tribe of Indians SOP BI002). Organisms were identified to the lowest possible taxa. Adults of *Agabus seriatus* are identified by their lotic habitat, relatively large size and elongate shape, their almost uniform black color, and small meshes on the elytra that often contain micropunctures of varying sizes (Hilsenhoff 1993).

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Figure 1. Photograph of the left mesotarsus of a specimen of *A. seriatus*, illustrating tarsal anomaly.



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