

**Two Streams Macroinvertebrate Sample  
Poke 3 at Bynum Ridge Road Bridge  
Date Sample Taken: November 10, 2007  
ID session February 6, 2008**

***February 6, 2008 Lab ID Session Notes***

(Notes by Cynthia Crossen)

IDers: Neville Handel, Jeannie Ambrose, Catherine Deininger, and Betsy Kraus

This sample was taken during the drought of 2007.

1. We identified this Isonychiidae from the Traveling Kick, because of the fringed tail and forelegs, and because of the light dorsal stripe. Photos below are:  
Poke3 20071110 TK Isonychiidae a3\_uv.jpg, Poke3 20071110 TK Isonychiidae a2\_uv.jpg, Poke3 20071110 TK Isonychiidae a1\_uv.jpg.



2. We found Tipulidae (crane flies) that had two distinctly different tails. The first photos are:



These photos are of the first type of Tipulidae:  
Poke3 20071110 LP Tipulidae a1\_uv.jpg, and Poke3 20071110 LP Tipulidae a3\_uv.jpg.



This is the second type of Tipulidae: Poke3 20071110 LP Tipulidae b1\_uv.jpg.

3. These are excellent specimens of Hydropsychidae caddisflies: Poke3 20071110 LP Hydropsychidae c1\_uv.jpg. We noted the three sclerotized thoracic plates, and the gills on the underside of the abdomen.



4. This is a damselfly, family Coenagrionidae: Poke3 20071110 TK Coenagrionidae a1\_uv.jpg.

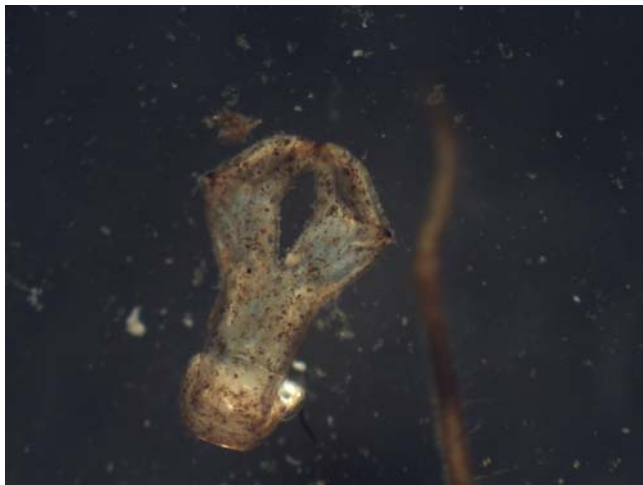


Distinguishing characteristics are: (1) uniformity of length in the antennae segments; (2) shape of the tail segments were lanceolate; (3) the shape of the head was more club-shaped as opposed to hammer-shaped; and (4) the jaw was triangular-shaped.

5. These are Philopotamidae caddisflies. Poke3 20071110 LP Philopotamidae a2\_uv.jpg We concluded this because of (1) only first thoracic plate is schlerotized; (2) you can see the T-shaped upper lip. The coloring matches the illustration.



6. Below are pictures of Calopterygidae (Broadwinged Damselfly). Identified by the 1<sup>st</sup> segment of the antennae is very long compared to the other segments (See the 2nd picture below). Also the lip has a deep notch seen the 3<sup>rd</sup> and 4<sup>th</sup> pictures.



7. This is this photo: Poke3 20071110 VI Left\_Eubriinae a1\_uv & Rt\_Psepheniae a2\_uv.jpg



On the left is a Eubriinae, a False Water Penny. On the right is the Psepheniae, a Water Penny. The true Water Penny has gills on the underside below the legs. The abdominal segments of the False Water Penny are somewhat separated laterally.

8. This photo is: Poke3 20071110 VI Pleuroceridae a1\_uv.jpg . The closeup shows the operculum lifted up on the left.



9. Poke3 20071110 LP UNKElmidae a1\_uv.jpg. Cynthia thinks this is an Elmidae riffle beetle larva, based on tail and hard segments. We looked at reference photos, and Jeannie thought that the head was different because of the antennae; and our specimen has a knob on the ventral area below the head (neck area).



10. We liked this asian clam eating a mayfly. We identified the clam because of the pronounced and rough ridges, which makes it a Corbiculidae clam. We identified the mayfly as a Heptageniidae because the claw was single, the eyes were big, and head was broad.



11. Poke3 20071110 SB Aeshnidae a3\_uv.jpg We identified this as an Aeshnidae dragonfly because of the tail and the jaw.



12. Poke3 20071110 VI UNKPerlodidae a1\_uv.jpg Betsy wasn't sure of this ID as a Perlodidae. It was very small (this is the maximum zoom). We didn't see any gills. It looked like it was patterned.

