

August 22, 1949 #2.

While exploring the stream preparatory to seining, I found several groups of redds similar to that found yesterday in the Frisco above Alma. Presumed to be Agonia

Many eggs were recovered and preserved. They seemed to be buried fairly deeply since I tried without success to see them on the surface (conditions were poor - slight cloudiness of water and wind) and tried to suck them with the syringe. Best results were obtained by scooping up the sand and gravel about $\frac{1}{2}$ - $\frac{3}{4}$ inch deep from the redd and then using gold-panning technique.

No small fry could be found. Most likely because of the poor visibility.

Redds were located ^{in pools} most frequently at the upstream border of a sandy bar. Fresh redds were observed ^{above} both submerged and emerged bars. One large group of redds was along the shore, parallel to the flow of the stream rather than at right angles to the flow. A few small groups were observed in the middle of shallow pools at the front of small bars.

Depth to top of ridges: mostly 5-8 cm., ~~some~~ many in shallower water, ~~no~~ several exposed. These were photographed to show shape.

The current was not perceptible over the redds, most water movement was wind caused rather than general stream flow.

✓
August 22, 1949 # 3.

The bottom was composed of sand and fine gravel. The gravel was deeper and was exposed through the digging. Some nests, ~~some~~ somewhat less than half reached gravel; the remainder were in sand alone.

Each redd was a conical depression 10-20 cm across, mostly 10-16 cm; 3-6 in, mostly 4-5 cm deep.

The redds were rarely single. They were usually in groups of several to many, close together about 4 to a square foot. Areas so occupied measured as large as 15 x 4 and 25 x 2-3 feet.

Picked up some Bufo at dusk.

January 24, 1950 #2.

Sorted:

N.M., Catron Co., Gila R. 7 mi. SE of Virden

T195 R20 W 521

Aug. 22, 1949

W. J. Koster, K. R. Cobern.

Pantosteus clarkii (B+B)

24 yg-ad.

22 yg- 26-46 m SL.

1 juv. 59 m SL.

1 ad 137 m SL.

Catantonus insignis B+B.

196 yg-ads.

171 yg-juv. 25-70 m SL.

25 ads. 120*-175 m SL.

Ameiurus natalis Le Sueur

1 juv. 64 m SL.

Ameiurus nebulosus (Le Sueur)

197 41 m SL.

A2, interradial membranes not conspicuously darkened.

Ameiurus melas (Raf)

349-ads.

149 35 m SL.

2 ads 160-190 m SL.

January 27, 1950 #3

Cela R 7 mi. SE of Virden

Icterus laevis punctatus (Raf)

23 yg - ads.

15 yg 30-40 m Sh.

8 145-175 m Sh.

Pelodictus olivaceus Raf.

14 yg - ad.

2 yg 48-54 m Sh.

12 195-280 m Sh.

Agonia c. chrysozoster G.

672 larvae to ads + 250 ± eggs.

662 yg - ads 18-66 m Sh.

Some tuberculate

approx 250 eggs, mostly with prolarvae.

10 ± prolarvae. (~~to approx~~)

1 vial of eggs, stripped & water-hardened, discarded as worthless - was not preserved in time.

Bufo w. woodhousii G.

3 imagos 29-47 m S. L.

Thamnophis eques cyrtopsis (Kennicott)

1 ad.

Thamnophis marianus nigrolateris (Bacon)

1 ad.

Halbrookia texana Tranchel

5 ads, 44-64 m Sn-V.

Cnemidophorus t. tessellatus (Say)

5, 44-46 m Sn-V.