

August 29, 1950.

WJK50-08-29-01

Mumbus R. 1 mile above Mumbus (at ^{the} Christmas place)

7:45 Pantosteus plebeius apparently disturbed spawning in a riffle. Cuts, by.

7:50 Many Agonia and Pantosteus ~~seen~~ over Agonia reddes and in shallow water nearby; disturbed at approach.

8:15 Pantosteus, 3 ♂♂ and 1 ♀ milled about in one Agonia nest, then moved over to another and spawned.

8:30 Pantosteus spawned twice in Agonia nests. One ♂ was removed at the crucial moment. It milled with the others, however, and its nest was close to that of the ♀.

8:50. 1/8 mile below preceding

Pantosteus spawned 3 x in P. Current 1/2 ft/sec. Bed, gn. P. of ♂ behind that of ♀. Milled 1/2 sec. Actions like that of P. plebeius in June but less energetic.

Vial of eggs and young (not numbered) taken in P. along sandy shore over Agonia reddes
C 1/2 ft/sec., depth of reddes to 3 inches

August 29, 1950 #2

Vial 2. from Side of nice trout pool, 1/8 mile
down first redds. Austr, Bet, r.

Vial 3. shallow ruffles + pools (small) below
first group of redds at Christmas place. Cm. sl.

Vial 4. Redds at Christmas place.

Redds - about 50 in area 12 ft x 3 ft on the
slope of a low (1 ft) diversion dam. C. very sl.
Bad covering peagr.

V5 + 6 same place as V3 only Cm.

~~Paul~~

Collected some larger fish about noon and
again about 4 P.M. About 3 dead Agonia seen, One at
least, Agonia tuberculata.

One Pantostictus was highly colored. It was
described immediately after death in formalin. Colors
faded fast so no great attempt made to match exactly
with Mary + Paul.

Distinctly striped. (an redder reminded me of Almortonus)
Dorsum olive drab, side of H. + body dark olive, nearly
black, ^{narrow} vermilion stripe above black band from corner
of opercle to base of C. ^{narrow} Pale (was golden yellow) stripe
above this. Lower parts of H. + body white. V. pale
olive, C. reddish olive, PV + A saffron, P slightly
darker than ables.

October 19, 1950 #1

N. M. Kraut Co., Maudes R. 1 mile above Maudes.
Aug. 29, 1950 WSK.

Vial 1 Pantosteus plebeus
14 larvae ca 12-14 mm TL.

Agoria chrysoptera
10 eggs - early eye (pale) to nearly hatching.
52 prolarvae to late postlarvae
5-10 mm TL.

Vial 2 Pantosteus
late prolarvae - postlarvae.
609, 2-15 mm TL.
Agoria
larvae - postl. Ca 8-11 mm TL.

Vial 3 Agoria
mostly larvae, some to late postlarvae
Ca - 7-15 mm TL.

Vial 4 Pant.
1 prolarva ca 10 mm TL.
Agoria
62 eggs - blastula to near hatching
58 prolarvae to postlarvae. Ca 6-10 mm TL.

Vial 5 Pant.
3 postlarvae Ca 16 mm TL
Agoria
75 prolarvae to young
73 prolarvae to larvae Ca 6-13 mm TL
1 larva Ca 7 mm TL devoid of eyes.
1 young 25 mm SL.

Q 11, 1950 #2.

Mamitas R. (mile above Mamitas

Aug. 29, 1950 (cont)

Vial 6 Part.

1 postlarva ca. 6 mm TL.

Agoniz

20 larvae to early young. ca 8-14 mm TL.

O.A. 14, 1950.

Agoria eggs. Measured with mechanical stage,
Munich, Aug. 29.50, U. al 4.

greater diameter	lesser diameter	ore. diameter	<i>V. stellus</i>	<i>V. stellus</i> A.D.
1) 154.2 - 151.9 = 2.3	36.9 - 35.2 = 1.7	2.0	1.2	
2) 151.1 - 148.7 = 2.4	38.6 - 36.8 = 1.8	2.3	1.1	
3) 149.1 - 151.4 = 2.3	35.4 - 33.7 = 1.7	2.0	1.1	
4) 152.7 - 155.1 = 2.4	35.6 - 37.6 = 2.0	2.2	1.1	
5) 152.1 - 154.5 = 2.4	37.1 - 35.2 = 1.9		1.0	
6) 155.4 - 153.2 = 2.2	36.7 - 34.8 = 1.9		1.0	
7) 3.4 - 1.3 = 2.1	6.7 - 4.8 = 1.9		1.1	
8) 4.9 - 2.8 = 2.1	6.9 - 5.0 = 1.9		1.1	
9) 4.1 - 2.0 = 2.1	6.1 - 4.2 = 1.9		1.1	
10) 3.01 - 0.8 = 2.3	6.6 - 4.8 = 1.8		1.1	
11) 5.7 - 3.5 = 2.2	6.1 - 4.0 = 2.1		1.1	
12) 7.4 - 5.3 = 2.1	6.4 - 4.4 = 2.0		1.1	
13) 5.2 - 4.1 = 2.1	6.2 - 4.2 = 2.0		1.1	
14) 8.2 - 6.1 = 2.1	7.2 - 5.5 = 1.7		1.0	
15) 7.9 - 5.6 = 2.3	7.7 - 5.7 = 2.0		1.0	
16) 4.9 - 3.9 = 2.0	6.0 - 4.2 = 1.8		1.0	
17) 5.8 - 3.3 = 2.5	7.3 - 5.4 = 1.9		1.1	
18) 5.2 - 3.3 = 1.9	6.5 - 4.4 = 2.1		1.1	
19) 5.4 - 3.2 = 2.2	8.2 - 6.2 = 2.0		1.2	
20) 5.2 - 3.0 = 2.2	7.8 - 5.9 = 1.9		1.1	
21) 4.4 - 2.3 = 2.1	8.8 - 7.0 = 1.8		1.1	
22) 4.7 - 2.5 = 2.2	6.5 - 4.5 = 2.0		1.1	
23) 3.6 - 1.6 = 2.0	0.2 - 8.3 = 1.9		1.1	
24) 4.7 - 2.4 = 2.3	8.4 - 6.7 = 1.7		1.1	
25) 4.1 - 1.9 = 2.2	7.5 - 5.6 = 1.9	2.1	1.2	