

August 27, 1949 #1

WJK49-08-27-01

Joined the Gila about seven miles above the town of Gila.

The Gila from here to the border is all more or less similar: a sandy gravelly stream with large shallow pools and short gravelly riffles.

Generally speaking the stream is larger and more clear upstream (exception in turbidity from heavy showers in the mountains), with the lower reaches ^{are} almost entirely free shifting sand and fine gravel, rubble being very scarce, ~~to the condition~~ near Gila where the riffles are nubile and coarse gravel and the relative quantity of shifting sand is less. Upstream the riffles are larger and better developed and more frequent.

From an angling viewpoint, this is a catfish stream. Near Gila, the Gila trout would offer sport. Suckers (Catostomus) are eaten as evidenced by their presence in a ^{a boy's} string at Belvoir along with catfish.

The stream commonly had a peculiar sour smell. This was more noticeable downstream than up.

August 27, 1949

By and large the fish were not restricted to special habitats or niches in any pronounced manner.

Cetostomus

Wide spread but generally not taken from riffles generally abundant

Pantosteus

Indicative but more of a riffle fish than Cetostomus probably less common ^{than preceding} but possibly just more agile

Agyrta

Abundant in all habitats in the lower waters; comparatively scarce in the upper.

Meda

Scarce in the lower waters, abundant in the upper. Widely spread. Meda seems to replace Agyrta as the ubiquitous fish further up.

Tiaroga

With one exception, this was an inhabitant of the middle riffles. Occupies the niche of Charchtypus (of which we might have one). Fairly common or rare.

Osteo

Progressively more abundant upstream. The young are found in pools, the half grown and large adults in strong current.

Dactylopterus

More common in the lower or more particularly the middle regions. This in spite of the better pools upstream.

August 27, 1949 #3

Cyprinus

The cap was taken only below cliff ~~trees~~ and possibly one above Cila.

Ameriurus natalis

Found in deep pools only in the lower stretches

Ameriurus melas

Found in pools. Scarce in the upper sections.
None were taken in the stream proper higher up. The
ones from above Cila were in a deep isolated pool.

Kryptopterus Pilatellus

Found in ^{deep, most quiet} pools in the lower reaches.

Nicopeltes salmoneus

} Found only above Cila.

Muraopterus dolomieu

} in pools

Stream is probably more suited to
SMB than LMB.

✓
Aug. 27, 1949

Drainage Gila

Locality N. M., GRANT CO.

Gila R. about 7 mi. NE of Gila T4S R16W S31

Elev. 4766 Date Aug. 27, 1949 Collector WJK, K. R. Coburn

Size 30-70 ft wide, mostly 40 ft wide 1-2 ft deep some P to 4 feet
Condition low Fluctuation great

Temp. Air 92 Water 81 Time 1600 Weather c-ccl

Water WT Current m-str Bottom sd, r some silt

Vegetation sparse- Ranunculus

Shore Seepwillow, Cottonwood, Walnut, Sycamore Watershed Desert grassland
mesquite & oak

Capture Method 6 & 10 ft S

Time 900-1600

Dist. from shore s-s Depth -4 ft Orig. Pres. 10% F

Remarks:

Stream turbid. This morning Ken and I observed the river a few miles downstream. It was clear according to our recollections. Upon our arrival here, the stream was muddy.

Stream is considerably larger here than lower down

Pools and riffles are nicely dispersed and of a nice size.

Catostomus

C. in P & rf.

Pantosteus

F. C. in rf. & P.

Gila

Larger in strong C, smaller FC in backwater.

Agosia

F. C. Scattered in P & rf.

Meda

Abd. in P & rf.

Tiaroga

F.C. in rf.

?Cyprinus carpio?

I jumped seine.

Ictalurus

Yg. in P near brush.

Ameiurus

School of yg. from an isolated P about 4 feet deep.

Micropterus dolomeiu

F. C. IN P.

M. salmoides

F. C. IN P.

Bufo

Rana

✓
November 16, 1949

N.M. Cila R. about 7 miles NE of Cila, Aug. 27 '49 (cont.)

Catostomus virginicus B & G.

149 gg-ads. 24-185 mm SL.

112 gg - 24-45 mm SL.

37 half grown to ads. 73-185 mm SL

Pantosteus clarkii (G & G)

50 gg- ads. 25-103 mm SL.

40 gg 68-103 mm SL.

10 juv - small ads. 25-47 mm SL

Hioda fulgida G.

181 gg- ads. 23-58 mm SL.

Agonias c. chrysogaster G.

54 gg- ads. 20-63 mm SL

Tiaroga cohitis G.

8 juv - ads. 34-51 mm SL

Cila robusta robusta B & G.

young? 28-55 mm SL.

6 half grown 92-113

3 ads. 220 mm SL

November 16, 1949 #2.

Gila R about 2 mi NE of Gila, Aug. 27, 49 (cont)

Rhinichthys oscula garronii (Y&E)

1 ad 60 mm SL

Ictalurus punctatus (Raf.)

15 gg- 30-45 mm SL

Ameiurus melas Raf.

24 gg 23-29 mm SL

Nicropterus dolomieu

2 fingerlings 96-101 mm SL.

D X, 14 in each. This is the primary characteristic used by Hubbs & Lagley 1940, also used are shape and color. According to ~~this~~ the first, there are M. d. dolomieu but the color and especially the form resemble M. d. relax even to the teeth ^{of the lower jaw} being visible from alone.

Nicropterus s. salmoides (Lacépède)

6 fingerlings 47-69 mm SL.

Bufo compactilis

12 small images 21-35 mm SN-L

Largest very pale, color of Scaphiopus.?

Rana pipiens

4 images 32-41 mm SN-L

✓
Nov. 15, 1949

Cela R. about 7 miles N.E. of Cela Aug. 27, 69 (cont.)

Pantosteus

Like Catostomus shows two types, one with a large mouth (as large or larger than distance between V_{o's}), the other with a small mouth (less than dist. between V_{o's}) darker coloration, deeper body, shorter snout, etc.

Mouth differences may be due to different degrees of closure in both genera.

✓ November 9, 1949

N.M. Grant Co., Gila R. about 7 miles
N.E. of Gila. T4S, R16W, S31

Aug. 27, 1949

C. H. K., K. P. Coburn.

Catostomus

Seemingly 2 types, extremely similar if
not identical.

color.

darker

lighter

well arched

dorsal profile

slightly arched.

deep

A B

~~more~~ slender

reaches, or at
least extends beyond
margin of H.

does not reach
margin of H.

B

shorter

longer

mouth

small; upper lip
about $\frac{1}{2}$ cover

large upper lip
about $\frac{2}{3}$ - $\frac{1}{3}$ of cover

Scales from A B to C

smaller

larger

Snout

shorter, broader

longer, narrower

Eye

smaller

larger