

August 17, 47.

WJK47-08-17-01

Served the Pecos below Harroan dam -
opposite the Patach mines.

Rain finally arrived today. When we
first started out the days were hot and clear.
They became progressively cloudier with
storms all about. We had a shower last
night and another late this afternoon.

The Pecos is a queer river, always
presenting the unexpected and unusual.

Collecting, by and large, has been only
mediocre. Each site has been rather
monotonous in its variety of habitats and
relatively sparsely with its fish fauna.

At Malaga and below, the most
conspicuous element was Natiopsis luteus.
At the present locality (below Harroan dam)
Gambusia is dominant.

The impression that I get is that the
river goes nearly dry from time to time. In the
lower reaches the survivors have ^{chiefly} been the
inhabitants of self-bottomed pools ~~with~~ ~~without~~
with scant vegetation while here the
survivors have been from vegetation-rich pools.

August 17, 47^{#2}.

The water was clear at this point and considerable vegetation is developed in the pools and riffles. At the other stations, vegetation has been rather scant, especially submerged vascular plants. A possible explanation is that Black River carries (or some other source such as the mines) keeps the water somewhat turbid below and thus inhibits the growth of vegetation. The

An outstanding characteristic of the catches thus far has been the ^{presence of characteristic} ~~lack of~~ riffle dwelling species such as *P. femigans*, *Actinurus*, *Rhinichthys*, *Extrarius*. *P. luteus* + *P. caeruleus* were common in the riffles below here but both species are equally at home in quiet waters. Here *Gambusia* was common along the edges of the riffles and ~~was~~ when disturbed, did not hesitate to enter fairly fresh water. The few Planctons which we took were along the margins of the riffles. Lucania was found in weed patches, even some of those in the riffles. ~~The samples~~ Unless I missed seeing them, we failed to take any cyprinids today except *C. carpio*.

August 17, 1947 #3

To summarize: The scarcity of the true riffle species ~~and~~ suggests the ~~the~~ periodic drying of the riffles. The unlike faunas which has recolonized the riffles suggests two types of habitats which have been maintained during low water.

Drainage Pecos Locality R.M., Eddy co., Pecos R.,
1/4 mile below Harroun Dam.
Elev. 2900 Date Aug. 17, 1947 Collector W.J.K. G. Mertz
Size Where seined--broken into many channels--5-30 ft. wide, rf.
1-5 in d., P -4 ft. d. Below--50 yds wide. Cond. N Fluctuation Sl
Temp. Air 89 Water 80 Time 1600 Weather clear to rain
Water CW Current Sl-m-str Bottom st, gr, bo, br.
Vegetation Abd. Potamogeton (Ruppia), Characeae in some p & rf.
Shore Tall--5-6 ft. grasses Tamarisk reeds. Watershed D. Shr.
Capture Method 6-10 ft. S. Time 1100-1700
Dist. from shore 3-3 Depth -4 ft. Orig. Pres. 10% F.

Remarks:

In the area seined, the Pecos is divided into many small channels, bayous and small pools while below, it is a large lake-like pond.

From the highway bridge down, the stream is pond-like and in a unit, while above, the bridge, the stream has many channels.

Carpiodes Common--large ones seen feeding in shallows just before storm.

Cyprinus carpio--one released.

Gambusia--Abundant, in almost all niches, pools, rf, weeds.

Plancterus--Rare.

Huro salmoides--Abundant--many seen.

Sunfishes--Common, many seen

Lepomis megalotis Common--nesting. Several nests seen. 2 ♂'s captured and tagged. Nests were large. One of the above ♂'s had a redd. 60 cm. average width. Depth, 20-60 cm. \pm 5 cm. Silt cleared away to expose gravel.

L. cyanellus F.C.

L. macrochirus F.C.

Kinosternon florescens--two taken.

Oct 20, 1951 ²⁴

N.M., Eddy Co., Pecos R. west of Potosi Mines
Aug 17, 1947 W.S.K., G. Merty

Micropterus s. salmoides (Lacépède)

12 yg-juv. 43-94 mm SL.

Fundulus zebra G.

3 juv-ad. 38-45 mm SL.

Moxostoma c. congestum (B+C)

1 juv. 68 mm SL.

Rana pipiens Shufeldt

1 imago 90 mm SL.

Lepomis cyanellus Raf.

2 1 yg. 21 mm SL.

1 ad. 102 mm SL.

Lepomis megalotis aquileus

~~25~~ 2 yg. 26-35 mm SL.

3 ads. 92-96 mm SL.

Lepomis macrochirus

13 yg-juv.

no yg. 14-28 mm SL.

3 juv-ad. 50-105

Largest may be a hybrid.

Oct 20, 1951 #2.

Pres. W of Polack mines Aug. 17, 1947 cont.

Lucania parva venusta G.

70 yg - ad. 14-33 m SL.

Gambusia affinis speciosa G.

567 yg - ad. 11-50 m SL.

+4

10-50 SL JWB

571 JWB
