

RIO GRANDE – LOWER CANYONS SEGMENT

RM 690; 16:12; 1/6/92
above rapids. 10' x 1/4" seine

1 Astyanax mexicanus

RM 690.5; 16:52; 1/6/92
sandy bottom. 3 drags, 50 yds. 10' x 1/4" seine

2 Macrhybopsis aestivalis
2 Notropis jemezianus
3 Rhinichthys cataractae
1 Ictiobus bubalus

RM 691; 10:00; 1/7/92
electroshock

1 Ictalurus furcatus 55mm

RM 691; 14:40; 1/7/92
10' x 1/4" seine

1 Lepomis macrochirus

RM 691.5; 13:24; 1/7/92
Mexican side. 10 drags, 350 myds. 10' x 1/4" seine

2 Cyprinella lutrensis
2 Macrhybopsis aestivalis
6 Notropis jemezianus
3 Notropis braytoni
18 Rhinichthys cataractae
1 Ictalurus lupus 65mm (26 A rays)
3 Ictalurus furcatus
1 Pylodictis olivaris

RM 691.5; 13:58; 1/7/92

U.S. side. 10' x 1/4" seine

- 2 Cyprinella lutrensis
- 3 Macrhybopsis aestivalis
- 1 Notropis braytoni
- 5 Rhinichthys cataractae
- 2 Ictalurus furcatus

RM 691.9; 10:53; 1/7/92

5 drags, 200 yds. 10' seine

- 1 Lepisosteus osseus (returned)
- 2 Cyprinella lutrensis
- 1 Macrhybopsis aestivalis
- 13 Rhinichthys cataractae
- 1 Ictalurus furcatus
- 1 Lepomis macrochirus

RM 692.2; 10:33; 1/7/92

U.S. side. sandy, gravel bottom

- 1 Notropis jemezianus
- 3 Ictalurus furcatus

RM 692.5; 1/6/92

sandy bottom. MX side. 50 yd drag. 10' seine

- 4 Cyprinella lutrensis
- 3 Notropis braytoni
- 4 Rhinichthys cataractae
- 1 Ictiobus bubalus
- 3 Ictalurus furcatus
- 2 Pylodictis olivaris

RM 692.8; 10:15; 1/7/92

shoreline on MX side. 4 drags, 50 yds. 10' x 1/4" seine

- 6 Rhinichthys cataractae

RM 692.8; 14:53; 1/6/92

sand and gravel bottom. 100 yds. 10' seine

2	<u>Cyprinella lutrensis</u>	
2	<u>Macrhybopsis aestivalis</u>	
2	<u>Rhinichthys cataractae</u>	
2	<u>Ictalurus furcatus</u>	
1	<u>Ictalurus punctatus</u> (?)	(ca. 13", returned)
1	<u>Morone chrysops</u>	(returned)

RM 693.6; 9:50; 1/7/92

Dryden Crossing. 100 yds of shore in 4 drags. 10" seine

<u>Ictalurus furcatus</u>	2
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RM 693.7; 14:14; 1/6/92

upstream from Dryden crossing. 50m pull. 10' x 1/4" seine

<u>Cyprinella lutrensis</u>	1	
<u>Notropis jemezianus</u>	2	
<u>Ictalurus lupus</u>	1	200mm
<u>Ictalurus furcatus</u>	1	
<u>Morone chrysops</u>	1	

RM 694; 1/6/92

Agua Verde Rapids downstream. mainstream. 100-200 yds. sand & gravel bottom

<u>Ictalurus lupus</u>	2	112, ca. 280mm	(112 = 27 A. rays)
<u>Ictalurus furcatus</u>	3		

RM 694.1; 9:15; 1/7/92

U.S. side below Agua Verde Rapids. 3 drags, 30 yds. 10' seine

<u>Notropis jemezianus</u>	1	
<u>Ictalurus furcatus</u>	8	(1 @ 185 mm returned)

RM 694.4; 9:30; 1/7/92

upstream from Agua Verde Rapids on MX side. sand, gravel, rock bottom. 10' seine

<u>Cyprinella lutrensis</u>	2
<u>Notropis jemezianus</u>	3
<u>Notropis braytoni</u>	2
<u>Ictalurus furcatus</u>	2

RM 694.5; 1/6/92

ECM-92-1

Rio Grande above Agua Verde rapids at site of
1954 collection

<u>Menidia beryllina</u>	1
<u>Notropis stramineus</u>	3

RM 702.5; 1/8/92

<u>Macrhybopsis aestivalis</u>	2
<u>Rhinichthys cataractae</u>	50

RM 703.8; 1/8/92

<u>Cyprinella lutrensis</u>	4
<u>Notropis jemezianus</u>	3
<u>Notropis braytoni</u>	3
<u>Rhinichthys cataractae</u>	13 adults, 7 young
<u>Ictalurus furcatus</u>	4
<u>Pylodictis olivaris</u>	3

RM 703.9; 1/8/92

retained at UT-PA

<u>Cyprinella lutrensis</u>	6	
<u>Macrhybopsis aestivalis</u>	14	(nice adults)
<u>Notropis jemezianus</u>	5	
<u>Rhinichthys cataractae</u>	49	(nice adults)
<u>Ictalurus furcatus</u>	4	
<u>Lepomis macrochirus</u>	1	

RM 704; 16:30; 1/8/92

"Clark" island. 10' + bag seine

<u>Cyprinella lutrensis</u>	4	
<u>Macrhybopsis aestivalis</u>	11	(all young)
<u>Notropis jemezanus</u>	4	
<u>Notropis braytoni</u>	2	
<u>Rhinichthys cataractae</u>	35	(5 adults)
<u>Carpodes carpio</u>	1	
<u>Ictalurus furcatus</u>	2	
<u>Pylodictis olivaris</u>	2	

RM 704; 1/7/92

Lady Finger Bend, island rock bar

<u>Cyprinella lutrensis</u>	2	
<u>Notropis braytoni</u>	2	
<u>Rhinichthys cataractae</u>	26	
<u>Carpodes carpio</u>	4	
<u>Ictalurus furcatus</u>	2	
<u>Lepomis cyanellus</u>	1	
<u>Aplodinotus grunniens</u>	1	

RM 704.5; 12:45-13:15; 1/7/92

connected side pools, disconnected side pool was barren. 10' seine

<u>Cyprinella lutrensis</u>	5	
<u>Notropis jemezanus</u>	3	
<u>Rhinichthys cataractae</u>	3	
<u>Carpodes carpio</u>	10	
<u>Pylodictis olivaris</u>	1	
<u>Gambusia affinis</u>	1	

RM 705.2; 17:20;
Camp A. 15' seine

<u>Cyprinella lutrensis</u>	1
<u>Macrhybopsis aestivalis</u>	4
<u>Notropis jemezianus</u>	2
<u>Rhinichthys cataractae</u>	3
<u>Pylodictis olivaris</u>	1
<u>Lepomis cyanellus</u>	1

RM 706; 10:30 - 10:50; 1/7/92
15' and 30 ' bag seines

<u>Dorosoma cepedianum</u>	2	62,79mm	
<u>Cyprinella lutrensis</u>	9		23-43
<u>Macrhybopsis aestivalis</u>	7	20-23	
<u>Notropis braytoni</u>	3	22,24,26	
<u>Rhinichthys cataractae</u>	138 @	14-19, 5@48-56	
<u>Ictiobus bubalus</u>	2	50-67	
<u>Carpionodes carpio</u>	3	18,25,30	
<u>Gambusia affinis</u>	9	25-32	
<u>Menidia beryllina</u>	1	36	
<u>Lepomis macrochirus</u>	1	33	

RM 706; 17:00; 1/7/92
electroshocking

<u>Ictalurus furcatus</u>	3	55,147,300	
<u>Pylodictis olivaris</u>	1	68	
<u>Aplodinotus grunniens</u>	1	213	

RM 706.8; 9:30; 1/8/92
15' seine

<u>Cyprinella lutrensis</u>	27	20-35mm	
<u>Carpionodes carpio</u>	2	21,24	
<u>Lepomis cyanellus</u>	58	19-85	

RM 707.3; 16:00-16:20; 1/7/92
at island. 10'-15' seine

<u>Cyprinella lutrensis</u>	3	26,27,32
<u>Macrhybopsis aestivalis</u>	3	19,33,37
<u>Notropis jemezianus</u>	8	25-33
<u>Notropis braytoni</u>	7	23,26,40-44
<u>Rhinichthys cataractae</u>	7	17,47-50
<u>Pylodictis olivaris</u>	2	70,81

RM 708; 10:30; 1/8/92
gravel bar. 10' seine

<u>Dorosoma cepedianum</u>	1	66mm
<u>Cyprinella lutrensis</u>	2	28,37
<u>Notropis jemezianus</u>	1	37
<u>Notropis braytoni</u>	3	22,30,41
<u>Rhinichthys cataractae</u>	3	47,47,48
<u>Ictiobus bubalus</u>	2	59,64
<u>Carpionodes carpio</u>	3	20,25,40
<u>Pylodictis olivaris</u>	1	60

RM 708.5; 12:00-12:45; 1/8/92
gravel bar on U.S. side. 15' seine

<u>Astyanax mexicanus</u>	1	35mm
<u>Cyprinella lutrensis</u>	4	31-37
<u>Notropis braytoni</u>	7	23-42
<u>Rhinichthys cataractae</u>	9	51-53
<u>Lepomis macrochirus</u>	1	91

RM 710.4; 12:15; 1/7/92

San Francisco Rapids, both sides. 10' & bag seine

<u>Astyanax mexicanus</u>	1	58mm
<u>Cyprinella lutrensis</u>	4	22-26
<u>Macrhybopsis aestivalis</u>	4	20,30,32,33
<u>Notropis braytoni</u>	3	21,40,41
<u>Rhinichthys cataractae</u>	3	48,53,61
<u>Ictalurus lupus</u>	2	81,208 (26 A rays)
<u>Ictalurus furcatus</u>	7	55-138
<u>Gambusia affinis</u>	6	18-28
<u>Lepomis macrochirus</u>	1	110

RM 707.3

shocking

<u>Carpoides carpio</u>	480 (plus 2 heads)
<u>Ictiobus bubalus</u>	460,495 (plus 1 head)

Ictalurus lupus

	anal	head	pect.	c.p.	snout	mouth	A			
SL	base	lngh	spine	depth	width	width	rays	A	B	C
280	77	59	35	27	30	31	26	-2.06	8.0	0.8
208	54	52	28	19	21	21	26	-2.13	7.4	0.7
200	53	44	26	19	18	19	27	-2.20	7.7	0.7
112	31	29	15	11	11	11	26	-1.88	7.5	0.7
81	23	22	11	8	8	9	26	-1.84	7.4	0.7
65	20	19	9	6	6	7	26	-1.75	7.2	0.7

A = Kelsch score (lupus > -1.97, punctatus <-1.97)

B = SL/pectoral spine length

C = caudal penduncle depth/pectoral spine length