

margin of eye); depth of head greater than length of snout plus eye (depth of head less than snout plus eye); scales of breast obscure, imbedded forward (scales of breast regularly imbricated, not imbedded); margins of lower fins all well rounded, all of them shorter than in typical *catostomus* (margins of lower fins all more angular, some of the rays being longer than others). Distance of end of supraciliary mucous canal from transverse nuchal canal twice as great as in the typical form. Such differences would be considered of no value for purposes of classification in specimens from the same river system, and indeed I am not able to find any tangible differences between specimens 490 mm. long from the Columbia at Revelstoke and the Bow at Calgary or the Swift Current. The larger specimen has the back and sides quite dark, centers of the scales toward the belly white; belly entirely white. A red dash band along the lateral line. The young from all localities are mottled gray.

- 9. Catostomus griseus** (Girard). Swift Current, Medicine Hat, Craig. One specimen, 116 mm. long, was taken at Swift Current. Caudal as long as head, 4 $\frac{1}{2}$ in. the length. D, II, 10. Sides to ventral surface dark-grayish, variously mottled. Lower surfaces, white. A number of specimens were taken at Medicine Hat, the largest 90 mm. long. These smaller specimens can readily be distinguished from *C. catostomus* of the same size by their much larger mouth which very much resembles that of *Pantosteus*. The jaws are provided with horny or cartilaginous sheaths, making the resemblance to *Pantosteus* still greater.

- 10. Catostomus macrocheilus** Girard. Sicamous, Kamloops, Umatilla, La Grande, Caldwell, and Idaho Falls. I saw a species of this genus in Griffin Lake, but was unable to secure it. At all probability it was *C. macrocheilus*, since this species was obtained a few miles farther west at the mouth of the outlet of this lake. The largest specimen was obtained at La Grande, and measured 380 mm. It is quite dark to below the lateral line, where, from a line just above the upper lip to the lower part of the caudal, the color abruptly changes to white. The pectorals, ventrals, and part of the anal are dusky, and a dusky bar extends upward from the base of the pectoral. The local variation in dorsal rays is well marked. Aside from the two undivided rays at the beginning of the fin the rays are as follows:

Locality.	Dorsal rays.					
	11 $\frac{1}{2}$	12 $\frac{1}{2}$	13 $\frac{1}{2}$	14 $\frac{1}{2}$	15 $\frac{1}{2}$	16 $\frac{1}{2}$
Sicamous.....	1	1	3	.....	.....	.....
Kamloops.....	2	2	3	.....	.....	.....
Umatilla.....	1	31	8	1	.....	.....
La Grande.....	2	2	1	.....	.....	.....
Caldwell.....	3	3	.....	.....	.....	.....
Idaho Falls.....	1	3	.....	.....	.....	.....

These last specimens approach *Catostomus ardens*.

- 11. Catostomus commersoni** (Lacépède). Winnipeg, Westbourne, Qu'Appelle, Regina, Moose Jaw, Swift Current, Maple Creek, Medicine Hat, Calgary, Poplar. Very abundant everywhere. Scales, 55-69.
- 12. Moxostoma aureolum** (Le Sueur). Winnipeg, Westbourne, Brandon, Poplar. Lower fins, especially the caudal, red. D, 11 $\frac{1}{2}$ to 16 $\frac{1}{2}$. Specimens 210 mm., from Winnipeg, have the head 5 in the length.
- 13. Moxostoma anisognathum** Rafinesque. Winnipeg, Brandon. This species is much less abundant at Winnipeg than the preceding. The specimens measure from 90 to 285 mm. Head, 31 to D, 16 $\frac{1}{2}$ or 17 $\frac{1}{2}$, counting all the rays. A, 8 $\frac{1}{2}$. Upper caudal lobe little longer than lower in largest specimen. The largest specimen differs little from one obtained at Toledo, Ohio. Scales, 6-39 to 43-5. Color lighter than in the preceding species, no red on the fins.
- 14. Hybognathus placita** Girard. Abundant at Poplar, but not seen elsewhere.
- 15. Acrocheilus alutaceus** Agassiz & Pickering. Umatilla, Caldwell.
- 16. Pimephales promelas** Rafinesque. Winnipeg, Westbourne, Brandon, Qu'Appelle, Regina, Swift Current, Maple Creek, Medicine Hat. Very abundant everywhere, especially so at Regina and Swift Current; least so at Qu'Appelle.

17. Not
Note

18. Not
Note

19. Not
Note