A NEW HOST FOR Chilodenella cyprini (Moroff, 1902)

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During the summer of 1969, 53 fish (representing six species) were examined for gill parasites. All fish were taken from the Yellowstone River, Livingston, Montana. One specimen, a longnose sucker (Catostomus catostomus), was infected with Chilodonella cyprini which we believe represents a new record in North America (Hoffman, G. 1967. Parasites of North American Freshwater Fishes. Univ. of Calif. Press, Berkeley). This was the only sampled fish infected with gill parasites.

Gill samples were examined from the following fish species: eight Salmo trutta, five S. gairdneri, eight S. clarki, three Catostomus catostomus, one platyrhynchos, and twenty-eight Prosoplum williamsoni. Infected gills were fixed in formalin, prepared for histological examination by routine methods and stained with hematoxylin and eosin. Hyperplasia of the epithelium and hemorrhage occurred near the areas occupied by the protozoa (Fig. 1).

Bykhovskaya-Pavlovskaya (1962. Key to Parasites of Freshwater Fish of the U.S.S.R. Zool. Inst., Acad. Sci. U.S.S.R.) stated that, "Chilodonella causes irritation of integuments, severe mucous discharge (blistorrhoea) and if the host is emaciated, destruction of epithelium and impairment of respiratory function of the skin and gill filaments".

There were no similar protozoa in the gills of either the other two longnose suckers examined or the other fishes collected at the same time. This is the first known record for C. cyprini in longnose suckers from North America.

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FIGURE 1. A longitudinal section through an infected longnose sucker gill showing Chilodonella cyprini (arrows). Note lesions around the parasite. Normal lamella (N). Scale equals 100 microns, stain, Hematoxylin and eosin. Inset A is a higher magnification of the gill section next to the arrows. Inset B is a high magnification of C. cyprini surrounded by host blood cells.