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The Osteology of *Cheimarrichthys fosteri* Haast  
(Pisces, Percomorphi)

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*Abstract*

THE osteology of *Cheimarrichthys fosteri* is described. Although *Cheimarrichthys* is a Percomorph it has a reduced orbitosphenoid. It appears to differ from other families in the superfamily Trachinoidea. The presence of a hypurapophysis is noted. The skull, vertebral column and caudal skeleton are illustrated.

INTRODUCTION

*Cheimarrichthys fosteri* (Fig. 1) is the only species in the family Cheimarrichthyidae. It is restricted to New Zealand, living in fresh water, at least in the adult and juvenile stages. Woods (1963) and Stokell (1955) discuss what is known of its habitat and life history.

The spelling of both the family and the generic names are in question. Stokell (1955) and Bassett (1961) use Cheimarrichthyidae and *Cheimarrichthys*. Woods (1963) uses the latter generic name. Phillipps (1927) uses Cheimarrichthyidae and the generic name similar to Woods and Stokell. Regan (1913) and Berg (1947) use Chimarrichthyidae and *Chimarrichthys*. Haast (1873) used *Cheimarrichthys* in his original description.

The International Code of Zoological Nomenclature, Article 29, states that a family name is to be formed by the addition of -idae to the stem. The form Cheimarrichthyidae is therefore correct.

MATERIALS AND METHODS

The specimens examined came from streams on the west coast of the South Island from the lower Buller River system to Hokitika.

Bone structure was examined by clearing and alizarine staining as described by Hollister (1934). The skulls were then picked of all muscle and examined. The remainder of the skeleton was examined *in situ*. The drawings were made with a 10 x 10 wipple disc and squared paper. All scales on the figures equal 1mm except Fig. 1, where the scale is 1cm.