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## A new species of *Helobdella* (Hirudinida: Glossiphoniidae) from Oregon, USA

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### Abstract

*Helobdella bowermani* n. sp. is described from specimens collected in fine sediment of open water benthos of Upper Klamath Lake, Klamath County, Oregon. The new species has pale yellow/buff coloration with scattered chromatophore blotches throughout the dorsal surface, lateral extensions or papillae only on the a2 annulus, dorsal medial row of papillae with small papilla on a1 and larger papillae on a2 and a3, and a small oval scute (rarely triangular). *Helobdella bowermani* n. sp. is morphologically similar to *Helobdella atli* and *Helobdella simplex*. Molecular comparison of CO-I sequence data from *H. bowermani* n. sp. revealed differences of 10.6%–10.8% with *Helobdella californica*, differences of 12.2%–13.7% with *H. atli*, and differences of 12.7%–13.2% with *H. simplex*.

**Key words:** *Helobdella californica*, *Helobdella simplex*, *Helobdella atli*, Pacific Northwest, Oregon, Upper Klamath Lake, Glossiphoniidae, Hirudinea, Rhychobdellida, Clitellata, leech

### Introduction

The genus *Helobdella* Blanchard, 1896 is comprised of a group of species in the family Glossiphoniidae that are widely distributed throughout the Americas with 48 nominal species being represented from South America and 8 species recognized in the United States (Siddall & Borda 2003; Christoffersen 2009). Members of the genus *Helobdella* are small predaceous leeches characterized by a pair of well-separated cephalic eye spots. These benthic leeches are often associated with organically enriched waters (Sawyer 1986; Moser *et al.* 2009). Although several comprehensive studies have addressed *Helobdella* spp. (Siddall & Borda 2003; Siddall *et al.* 2005; Christoffersen 2009; Lai *et al.* 2009) relatively little is known about the helobdellid leech fauna of the northwestern United States. In the course of a seasonal distribution survey of benthic invertebrates of the Upper Klamath Lake Ecosystem (Klamath County, Oregon), a previously undescribed species of the genus *Helobdella* was encountered and is described herein.

### Materials and methods

**Collection of Leeches.** Leeches were collected from May 2008–May 2012 in Upper Klamath Lake at Bay Ball (42° 24' 21" N 122° 01' 01" W), mid-trench (42° 23' 05" N 121° 55' 38" W), mid-north (42° 26' 22" N 122° 00' 40"