

## SCIENTIFIC NOTE

### *Carabus granulatus* Linnaeus (Coleoptera: Carabidae) in Idaho: New state record

*Carabus granulatus* Linnaeus, 1758 is an adventive Palaearctic species that was first documented in the Nearctic in 1890 (Brown 1940). However, its reported distribution is disjunct as represented by two subspecies: *C. g. hibernicus* Lindroth, 1956 occurring in New Brunswick, Newfoundland, Nova Scotia, Prince Edward Island, and Québec in Canada and on the French islands of Saint-Pierre et Miquelon; and *C. g. granulatus* occurring in British Columbia, Ontario, and Quebec in Canada and Massachusetts, USA (Bousquet and Laroche 1993; Majka *et al.* 2006). *Carabus g. granulatus* is a synanthrope occurring in a number of habitats, but preferably near water (Lindroth 1961; Laroche and Larivière 2003). It is primarily nocturnal, overwinters as an adult (sometimes in aggregations), and feeds on snails (predominantly), insects, and earthworms (Laroche and Larivière 2003).

*Carabus g. granulatus* has also been found in the state of Washington since 1924 (Hatch 1953), but not elsewhere in the western USA. As part of a larger study to assess the ecological effects of dam operations on the Kootenai River and floodplain, the authors collected 51 *C. g. granulatus* in pitfall traps from May–September 2005 to 2007 in Boundary Co., Idaho. Most specimens (49) were collected from eight sites in the Kootenai National Wildlife Refuge, 32 km south of British Columbia, Canada and 6 km west of Bonners Ferry (Lat. 48°42'55.8" Long. –116°24'12.9"; elevation 540 m). However, two were collected from the braided reach of the Kootenai River (Lat. 48°42'1.2" Long. –116°12'35.1"; elevation 544.2 m). The refuge, on the west bank of the Kootenai River, is managed primarily for migrating waterfowl by maintaining wetlands (*e.g.*, open water ponds, seasonal cattail-bullrush marshes, tree-lined ponds, and creeks) among a variety of habitats (meadow, mixed-conifer, riparian, agricultural fields, and grasslands). The refuge likely provides environmental conditions and food for *C. g. granulatus* with its abundance of managed habitats, wetted soils, and gastropod fauna (*e.g.*, snails were commonly captured together with the beetles).

### Literature Cited

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