

## **CHAPTER 6**

# **Migratory Behavior of Adult Pacific Lamprey and Evidence for Effects of Individual Temperament on Migration Rate**

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### **Introduction**

Migratory fishes often exhibit extreme variation in individual behavior, which can result in life history diversity. Telemetry and otolith microchemistry techniques have revealed that some individuals of a given anadromous population exhibit extensive marine migrations, whilst others remain in freshwater and may never even leave the vicinity of their natal areas (Gross 1991; Thorpe et al. 1998; Waples et al. 2004; Miller et al. 2011). Telemetry studies are replete with examples of individuals that perform at levels far outside those predicted by a normal distribution (Aarestrup et al. 2002; Cote et al. 2002; Keefer et al. 2004). However, the mechanisms generating variability in migratory behavior and their fitness consequences are unknown for most species. In this paper, we examined individual variation in lamprey migration rates.

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