

## RED IRISH LORD

*HEMILEPIDOTUS HEMILEPIDOTUS* (TILESUS, 1811)

NATURAL HISTORY SUMMARY BY JESSICA CARRASCO

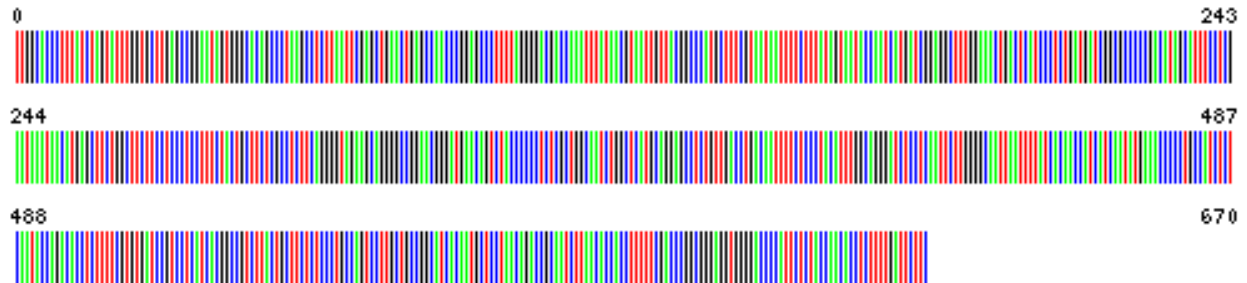


Figure 1. [Hemilepidotus hemilepidotus DNA Barcode](#) - Barcode of Life Database - BOLD Systems (Ratnasingham and Hebert 2007)

### Classification

**Kingdom:** Animalia

**Phylum:** Chordata

**Class:** Teleostei

**Order:** Scorpaeniformes

**Family:** Cottidae

**Genus:** *Hemilepidotus*

**Species:** *H. hemilepidotus*

### Description

The Red Irish Lord, *Hemilepidotus hemilepidotus*, is described as a colorful fish, predominantly red with white and brown mottling, but sometimes pink, yellow, as well as with some orange hues. The colors may vary because this species can change color to blend in with its surroundings (Washington Department of Fish and Wildlife 2017). It is a large sculpin in the Cottidae family with a maximum length and weight of approximately 51.0 cm and 1.11 kg, respectively (Froese and Pauly 2017). Like most sculpins, Red Irish Lords are only partially scaled. The name *Hemilepidotus* comes from the Greek “Hemi” for “half” and “lepis” for “scale” (Froese and Pauly 2017). Sculpins normally have an elongated body, typically with large broad heads and eyes. The gill covers have one or more spines. The pectoral fins are large and fanlike (The Editors of Encyclopædia

Britannica 2017). Some key features of the Red Irish Lord include a defined band of scales around the dorsal fin on its back ,4 to 5 scales wide and a second band below the lateral line approximately 10 scale rows wide (Washington Department of Fish and Wildlife 2017). The single dorsal fin is divided into three step notches, and there are 10-12 dorsal spines, 18-20 dorsal soft rays, and 35 vertebrae. There is also the absence of fleshy flap on the nostrils (Fretwell and Starzomski 2015).

### **Distribution**

The Red Irish Lord distribution includes the North Pacific Ocean, from the Bering Sea in Russian Alaska to Washington (rarer south of that, to Monterey Bay in Central California). Common in the Pacific Northwest, they can be found locally in Puget Sound. (Washington Department of Fish and Wildlife 2017). Sculpins are benthic (bottom-dwelling), inactive fish, found predominantly in shallow sea waters, but some are known to live at deeper depths. (The Editors of Encyclopædia Britannica 2017). *Hemilepidotus hemilepidotus*' [range map](#) is available at Aquamaps 2016.

### **Diet**

The Red Irish Lord (*H. hemilepidotus*) specimen from the [Burton Ostenson Museum of Natural History](#) at Pacific Lutheran University was is a carnivorous ambush predator or sit-and-wait predator, blending into its surroundings, using its color morphing ability as camouflage to conceal its self from its prey (Pbs.org 2017). As a bottom dweller, it typically feeds on slow-moving crabs, shrimp, mussels, and barnacles (Froese and Pauly 2017). It scans its environment and rapidly executes a surprise attack when prey come near it (DeVries, et al. 2012). As compared to other closely related species of sculpins, the Red Irish Lord appears to have a faster jaw. It's inclined to hide deep within rock crevices, striking out for food and quickly returning to its position (Finley 2017).

### **Habitat and Ecology**

The Red Irish Lord is a coastal marine fish that prefers a rocky habitat in shallow reef areas from the intertidal zone to around 50 m to 275 m in depth (Fretwell and Starzomski 2015). Nestled among rocks and debris with other marine life, it can blend in

with its surroundings (Pbs.org 2017). As a benthic predator, it plays an important ecological role by keeping species in lower trophic levels in check (Shapiro 2017).

### **Reproduction and life cycle**

The Red Irish Lord is a non-migratory species. Like other Cottidae, it has five developmental stages consisting of an egg, larval, pre-juvenile, juvenile, and adult stage (Peden 1964). Males are known to build nests in intertidal areas where the females will then lay eggs in the spring. Males are known to guard the eggs (Pbs.org 2017). However, it appears that the Red Irish Lord exhibits primarily maternal and facultatively biparental guarding of the spawn (DeMartini and Sikkel 2006).

### **Conservation status**

The Red Irish Lord is currently unranked, meaning that it is found in abundance and is not currently threatened or at risk. (NatureServe, Inc. 2017).

### **Cultural significance**

There is no known cultural significance to any particular groups. The Red Irish Lord is not a game fish and is typically discarded by commercial fisheries, however, they are sometimes kept in aquariums (Fretwell and Starzomski 2015).

### **Specimen specific detail**

The Red Irish Lord (*H. hemilepidotus*) specimen from the [Burton Ostenson Museum of Natural History](#) at Pacific Lutheran University was collected on February 14, 1961 at Point Defiance Park, in Tacoma, Washington. The park is almost surrounded by Puget Sound, an inlet of the Pacific Ocean. The park provides a shallow rocky habitat and is home to various crabs, shrimp, mussels, and barnacles, making it an excellent location in which to find *H. hemilepidotus* (Metro Parks Tacoma 2017). In February of 1961, John F. Kennedy was president of United States, the then Soviet Union's launch of Sputnik 7 to Venus failed, and "Are You Lonesome Tonight?" by Elvis Presley was playing on the radio (OnThisDay.com 2017).

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