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FIRST RECORDS OF THE PACIFIC SNAKE EEL, *OPHICHTHUS TRISERIALIS*, IN OREGON WATERS

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ABSTRACT—We document the 1st records of the Pacific Snake Eel, *Ophichthus triserialis*, from washed-up specimens on the coast of Oregon. One specimen, with a damaged head region, was found near a public beach in Lincoln City, Lincoln County, Oregon, on 21 January 2017. We discuss another specimen found on a beach near Bandon, Coos County, Oregon, in March 2016.

Key words: Anguilliformes, Ophichthidae, *Ophichthus triserialis*, Oregon, snake eels

Members of the family Ophichthidae commonly inhabit coastal waters of tropical to warm temperate regions. The family is divided into 2 subfamilies, the worm eels, Myrophinae, with about 14 genera, and the snake eels, Ophichthinae, with about 45 genera including the genus *Ophichthus* (Nelson and others 2016). *Ophichthus* is the most species-rich genus in this family, with approximately 50 recognized species (McCosker and Rosenblatt 1998). The Pacific Snake Eel, *Ophichthus triserialis*, has been found from the intertidal zone down to 155 m depth (McCosker and Rosenblatt 1998), ranging from Peru to the mouth of the Klamath River in northern California (Quirollo and Dinnel 1975). The single specimen reported by Quirollo and Dinnel (1975) was a sexually immature female caught at a depth of 22 to 24 m on 28 October 1972, and its capture represented the northernmost observation of the species at the time. Herein, we describe a more northerly occurrence of *O. triserialis*, based on a specimen found on the coast of northern Oregon.

An *Ophichthus triserialis*, OS 20112, 980 mm total length (TL), was found dead on 21 January 2017 on the side of the road (Figs. 1A and B), 1 block from the public beach in Lincoln City, Lincoln County, Oregon (44.97670°N, 124.01519°W). Total length (TL) was measured with a custom wooden caliper to the nearest 0.5 mm; although damaged, the rostrum of the specimen was partially intact and thus the TL is approximate. An Oregon Coast Aquarium employee retrieved the specimen and donated

it to the Oregon State Ichthyology Collection (OSIC). The specimen was fixed in 10% formalin and transferred to 50% isopropanol for permanent storage. Radiographs were used to obtain the vertebral count. Tissue samples were taken prior to fixation from the left side of the body at the midpoint. Sex was determined by the clumps of eggs clustered around the exterior vent.

Although the head is damaged and some of the characters, such as dentition, posterior nostril, and head pores could not be determined (Fig. 1B), the coloration of the body as well as the median fins clearly identify the species as *O. triserialis* (McCosker and Rosenblatt 1998). The coloration is yellowish with rows of large black spots interspersed with smaller spots (Fig. 1B) and the median fins have a black margin. In contrast, the only other snake eel of the eastern North Pacific, *O. zophochir*, is uniformly gray and lacks spots (McCosker and Rosenblatt 1998). The *O. triserialis* specimen has 150 vertebrae and fits well within the range of 145 to 152 for the species (McCosker and Rosenblatt 1998). Although there is overlap, *O. zophochir* has 149 to 162 vertebrae, and the counts are usually higher than in *O. triserialis* (McCosker and Rosenblatt 1998).

The Oregon Department of Fish and Wildlife (ODFW) reported a 2nd specimen of the Pacific Snake Eel that was found on a beach near Bandon, Coos County, Oregon (exact coordinates unavailable), in March 2016. The specimen was found 1 d after an unusual occurrence on beaches south of Newport of the Pelagic Red Crab (*Pleuroncodes planipes*) (ODFW 2017), a subtropical to tropical species that has occasionally been reported off Californian coasts (Radovich 1961; Boyd 1967). However, this 2nd specimen was not collected, and the only evidence of its appearance on a beach in Oregon is an unpublished report with an associated image.

These 2 specimens are the 1st records of *O. triserialis* in Oregon waters, and the specimen



FIGURE 1. Pacific Snake Eel, *Ophichthus triserialis*, OS 20112. A) At collection locality in Lincoln City, Lincoln County, Oregon, on 21 January 2017. Photo provided by L Beck from the Oregon Coast Aquarium. B) In laboratory after preservation. Scale bar 100 mm. Photo by Francisco AT Pickens.

from Lincoln City (OS 20112) marks the species' northernmost occurrence, about 440 km farther north than reported by Quirollo and Dinnel (1975). Although the Lincoln City specimen was retrieved from an unusual location, the eel likely washed up on 1 of the nearest beaches, and perhaps was carried away from the beach by a

bird or other predator, as the specimen appeared fresh and decomposition was not obvious.

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