

## The Identity of *Coluber nutkensis* (Reptilia: Serpentes)

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The identity of *Coluber nutkensis* is discussed. The name originates from a manuscript and painting made on Vancouver Island by members of the Royal Botanical Expedition to New Spain in 1792. The drawing could be of a species of garter snake (*Thamnophis*). The name *Coluber nutkensis* is a *nomen nudum*.

Se discute la identidad de *Coluber nutkensis*, serpiente conocida de un manuscrito y un dibujo hecho durante el viaje a Vancouver Island, que se llevó a cabo por miembros de la Real Expedición Botánica a la Nueva España en 1792. El dibujo puede ser interpretado como perteneciente a una especie de culebra semiacuática del género *Thamnophis*. El nombre *Coluber nutkensis* es un *nomen nudum*.

Key Words: *Coluber nutkensis*, identity, *Thamnophis*, Vancouver Island, British Columbia.

The Royal Botanical Expedition to New Spain, better known as the Sessé and Mociño Expedition, was one of the most ambitious scientific exploration efforts of the eighteenth century. Between 1788 and 1803 explorations and collections were made in Mexico, the Caribbean, northern Central America, and the Pacific Coast of North America (Rickett 1947; McVaugh 1977). In 1792 two naturalists of the Expedition, José Mariano Mociño and José María Maldonado, were ordered by the Conde de Revilla-Gigedo, Viceroy of New Spain, to accompany a naval expeditionary force under command of Captain Juan Francisco de la Bodega y Quadra. The flotilla was sent to the "limits to the north of California" ["*La Expedición de Límites al Norte de California*"], primarily to resolve territorial disputes with the English on Vancouver Island (Wilson 1970). They reached Nootka Sound, Vancouver Island, on 29 April 1792 and remained there until 21 September 1792 (Wilson 1970).

During his five-month residence at Nootka Sound Mociño studied the history of the region and the ethnology of the Nootka Indians. His report, entitled *Noticias de Nutka*, is a remarkably complete and insightful study that attests to Mociño's scientific acumen. As far as we know *Noticias de Nutka* has been published, in whole or in part, three times (Mociño 1803-1804; Carreño 1913; Wilson 1970), the latter an English translation. Among other results of the expedition were a Nootka-Spanish dictionary compiled by Mociño and a catalogue of plants and animals of the region (Mociño and Maldonado 1792). Expedition artists, including Atanasio Echeverría

and Godoy, also from the Royal Botanical Expedition, prepared sketches of the landscapes and people of Nootka Sound and detailed drawings of local animals and plants.

The catalogue of the biota was deposited in the Spanish government archives in Madrid as part of Bodega y Quadra's report and was not published until 1968 (Arias Divito 1968). It includes a single herpetological entry — *Coluber nutkensis* — which thus takes as authors Mociño and Maldonado in Arias Divito, and date of publication as 1968. *Coluber nutkensis* is a *nomen nudum*. The catalogue was also published as an appendix in Wilson (1970), wherein *Coluber nutkensis* was suggested to be identical to *Coluber constrictor*, a species not known to occur on Vancouver Island (Gregory and Campbell 1984).

Assignment of this overlooked name to a North American snake species would be pure speculation, except for the existence of the Torner Collection of Sessé and Mociño Biological Illustrations in the Hunt Institute for Botanical Documentation. We have been able to assign all but one of the amphibian and reptile illustrations in the Torner Collection to Mexican species (McCoy and Flores-Villela 1985). The unidentified illustration (Figure 1) is of a snake in an undulating posture superimposed on a seaside scene, suggesting aquatic habits. Stylistically the painting is unlike those of the Mexican species, which are uniformly depicted on unadorned backgrounds or are posed on a minimal bit of substrate (McVaugh 1981; McCoy and Flores-Villela 1985). The background shoreline surmounted by buildings, and the rocks, dead tree and other vegetation in the

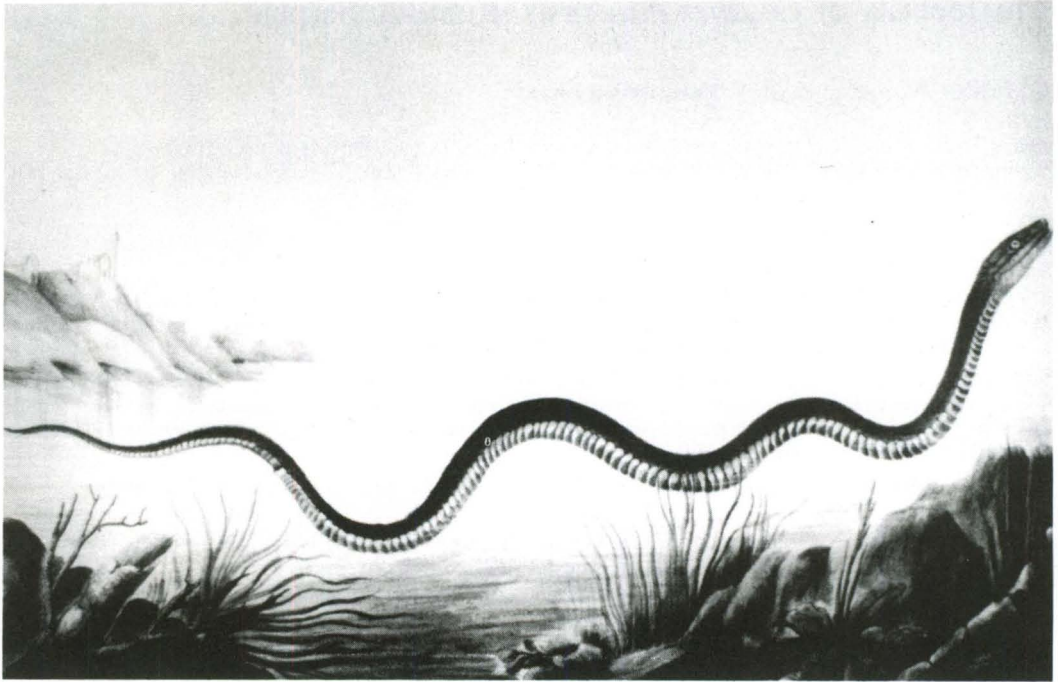


FIGURE 1. *Coluber nutkensis* (Hunt Institute for Botanical Documentation Accession no. 6331.1262), Nootka Sound, Vancouver Island.

foreground of this painting are characteristic of Nootka Sound paintings by artists of the Bodega y Quadra expedition [see examples in Wilson (1970)]. From these details we conclude that this painting (Hunt Institute accession number 6331.1262) was executed at Nootka Sound and represents the only snake taken there, the species listed by Mociño and Maldonado as *Coluber nutkensis*.

The question remains whether this painting, and thereby *Coluber nutkensis*, can be identified with one of the snake species known to occur on Vancouver Island. The painting is obviously of a colubrid snake, of which three species of *Thamnophis* (*T. elegans*, *T. ordinoides*, *T. sirtalis*) and *Contia tenuis* occur on the island (Gregory and Campbell 1984). The scutellation depicted does not permit identification; the most completely distinct, the ventrals, are too few for any of these species. The elongate head, distinct neck, slender body and attenuate tail suggest *Thamnophis*, but the obscure dorsal pattern without stripes and with dark-edged ventrals resemble the pattern of *Contia*. The alert and possibly swimming posture of the snake in the illustration, the implied seaside habitat, and the

dark-edged ventrals are consistent with identification as *Thamnophis elegans*, a species that inhabits littoral areas elsewhere in British Columbia (Campbell 1969; Gregory 1978). However, Vancouver Island *T. elegans* have a distinct mid-dorsal stripe, and published localities for the species from the west coast of Vancouver Island are all undocumented by actual specimens and are all questionable (P. T. Gregory, personal communication). Although we cannot make a positive identification of the illustrated snake, we suggest that it represents a species of *Thamnophis*, possibly *T. elegans*.

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## Literature Cited

- Arias Divito, J. C.** 1968. Las expediciones científicas Españolas durante el Siglo XVIII: Expedición botánica de Nueva España. Ediciones Cultura Hispánica, Madrid. 427 pp.
- Campbell, R. W.** 1969. Notes on some foods of the wandering garter snake on Mitlenatch Island, British Columbia. *Syesis* 2(1-2): 183-187.
- Carreño, A. M., Editor.** 1913. Noticias de Nutka, diccionario de la lengua de los Nutkeses, y descripción del Volcán de Tuxtla, por Joseph Mariano Moziño Suarez y Figueroa. Sociedad Mexicana de Geografía y Estadística, Mexico, D.F. cix + 117 pp.
- Gregory, P. T.** 1978. Feeding habits and diet overlap of three species of garter snakes (*Thamnophis*) on Vancouver Island. *Canadian Journal of Zoology* 56(9): 1967-1974.
- Gregory, P. T., and R. W. Campbell.** 1984. The reptiles of British Columbia. British Columbia Provincial Museum Handbook 44. viii + 103 pp.
- McCoy, C. J., and Oscar A. Flores-Villela.** 1985. Amphibians and reptiles of the Sessé & Mociño Expedition: a lost chapter in Mexican herpetology. *Annals of the Carnegie Museum* 54(5): 189-193.
- McVaugh, R.** 1977. Botanical results of the Sessé & Mociño Expedition (1787-1803). I. Summary of excursions and travels. *Contributions from the University of Michigan Herbarium* 11(3): 97-195.
- McVaugh, R.** 1981. Long-lost Sessé & Mociño illustrations acquired. *Bulletin of the Hunt Institute for Botanical Documentation* 3(1): 1-2.
- Mociño, J. M.** 1803-1804. Noticias de Nutka. *Gazeta de Guatemala*, 7-8 [*vide* Carreño, 1913: cviii, complete citation not available, not seen].
- Mociño, J. M., and J. M. Maldonado.** 1792. Catálogo de los animales y plantas que han reconocido y determinado según el sistema de Lineo los facultativos de mi expedición Dn. José Mociño y Dn. José Maldonado. Archivo del Ministerio de Asuntos Exteriores, Madrid. Manuscript 145 [not seen].
- Rickett, H. W.** 1947. The Royal Botanical Expedition to New Spain. *Chronica Botanica* 11(1): 1-86.
- Wilson, I. H.** 1970. Noticias de Nutka. An account of Nootka Sound in 1792, by Jose Mariano Mociño, translated and edited by Iris Higbee Wilson. University of Washington Press, Seattle, Washington. liv + 142 pp.

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