



Gartersnakes preying on Goldfish in Nakusp, British Columbia

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In early July, 2010, I introduced eight Goldfish (*Carassius auratus auratus*) to my backyard pond in Nakusp, British Columbia (UTM 11U E442125 N5566330). Seven of the fish were very small, two to three centimetres in length, while one was about twice as big. Later in July, I found the larger fish lying dead outside the pond. There is a significant lip to the pond and it seemed unlikely that the fish had jumped out. Since it had not been eaten, I thought it was not likely to be cat, or other mammalian predator, or even an avian predator that would likely fly off with a fish. Shortly thereafter, the smaller fish began to disappear one by one. During this same period, I saw a Terrestrial Garternake

(*Thamnophis elegans*) in the pond on two occasions which I suspected to be the culprit.

Later that year, Brent Lillies, a friend in Nakusp who also has a Goldfish pond, told me of an incident earlier in the summer where he had observed a Common Gartersnake (*Thamnophis sirtalis*) trying to swallow a Goldfish (Figure 1). The fish was too large to swallow and was eventually abandoned. He had also seen a snake with a fish in its mouth on two other occasions; one was another Goldfish and the other a small trout (*Oncorhynchus* sp.). Both were smaller fishes and both were eaten successfully. In addition, he had observed snakes swimming across his pond and diving down into the water.



Figure 1. Common Gartersnake with Goldfish taken from a residential pond in Nakusp, BC. *Photo by Brent Lillies, Summer, 2009. BC Photo 3751 (see Campbell and Stirling 1971).*

In British Columbia, foods of the Common and Terrestrial gartersnake have been studied extensively on the south coast and less so in the interior of the province (Campbell 1969, Farr 1988, Gregory 1978, 1983, 1991). Both species are known to eat intertidal and freshwater fishes (Gregory and Campbell 1984, Matsuda et al. 2006) but there is no mention of Goldfish, likely because the species is not native and thus not commonly encountered by gartersnakes unless presented opportunistically such as the situations like this. Goldfish were fed to Common Gartersnakes that were once on display at the Vancouver Aquarium many years ago (B. Matsuda pers. comm.). Ernst and Ernst (2003) list Goldfish as a food item for Common and Terrestrial gartersnake in other parts of North America. †

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About the Author



Gary is a naturalist and birder who has lived in Nakusp since 1975. He has been conducting Breeding Bird Surveys and coordinating Christmas Bird Counts for over 35 years. He is also an active participant in the British Columbia Nest Record Scheme, he served as chair of the British Columbia Field Ornithologists Birds Records Committee for six years, and he is presently a Director of the Biodiversity Centre for Wildlife Studies.

He and his wife, Marie, have made five trips to Australia, one of which was to work as a birding guide at a birdwatchers' lodge in northern Queensland. He retired in June 2005 from teaching high school mathematics. Since then Gary and Marie have travelled to Jamaica, Peru, and Costa Rica, partially in search of birds and partially in search of adventure!