



## Field Observation of Caravanning by a Family of Pacific Water Shrews in British Columbia

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On 26 June 1977, while exploring for wildlife along the Davidson Creek area (3 m elevation) of Fort Langley, southwestern British Columbia, I witnessed a rarely seen behaviour involving a family of Pacific Water Shrews (*Sorex bendirii*).



**Figure 1.** Drawing of Beaver (*Castor canadensis*) dam and pond at Davidson Creek visited by a family of Pacific Water Shrews. The young shrews waited on shore (upper left) while their mother dived for food at the base of cattail clumps (upper centre) in the pond. Sketch by Glenn R. Ryder, 26 June 1977.

My field notes for this exciting incident were:

*Bendire or Pacific water shrew family out at the east side of the beaver pond on Davidson Creek [Figure 1]. Female in lead with her 6 young trailing behind her with the lead young holding on to the tip of the female's tail and each young had a hold of the young in front of it [Figure 2]. All young had a tail tip in mouth until they reached a big log. They let go and all young stayed put while the female was diving down into the pond water at cattail clumps getting food for her young. She made 7 trips feeding all the young and her last trip was food for herself (likely dragon fly nymph, etc.). After the meal they all went up the hillside to the east woods holding tail tip to tail tip and vanished in the vegetation and forest floor litter.*

*What a good mother.*

The semi-aquatic Pacific Water Shrew, the largest shrew in British Columbia, is a habitat specialist and is a rarely observed mammal. Most records are from museum specimens (Nagorsen 1996, 2006), hence, behavioural observations are worth noting.

Caravanning is a behaviour exhibited by some species of shrews during early development of their young (Pattie 1973). The young follow behind their mother in a single file. While caravanning, the siblings either hold on with their mouth to the base

of the tail of the preceding shrew (Harper 1977, Nowak, 1991) or simply maintain contact by burying their nose into the fur at the base of the tail (Goodwin 1979). Goodwin (1979) observed caravanning when young captive Common Shrews (*Sorex cinereus*) were disturbed. However, Harper (1977) observed wild *Sorex sp.* and thought caravanning was used by the mother to introduce her young to the portion of territory near the nest. The Pacific Water Shrews that I observed were travelling and feeding. It appeared that caravanning was simply a way to keep the litter together as they were led about by their mother. This technique to manage many active but naïve young is also practiced in many neighbourhood kindergarten classes when they go on outings!

My observation also adds to our local knowledge about this species and the first information on breeding of this species (see Nagorsen 2006). In Oregon, the breeding season extends from February to August and two or three litters may be produced a year. Litter size ranges from five to eight young, with six being the most common (Maser 1998, Verts and Carraway 1998). Some of the young I observed on 26 June, however, may have died as they were older.

The Davidson Creek habitat was primarily in a riparian stand of mature black cottonwood (*Populus balsamifera* ssp. *trichocarpa*), unlike other forested habitats reported for the species' range in southwestern British Columbia (Nagorsen 2006). †



**Figure 2.** Part of the family of seven Pacific Water Shrews travelling together holding tails along a Beaver pond at Davidson Creek, British Columbia *Sketch by Glenn R. Ryder, 26 June 1977.*

### ***Acknowledgements***

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### ***About the Author***



Glenn has followed his passion for natural history throughout his entire life spending countless hours outdoors discovering some of the secrets that abound in the field. *Photo by Phil Henderson.*