



Northern Shrike Captures and Caches a Savannah Sparrow at Campbell River, British Columbia

Clyde H. Burton

4619 Fernwood Avenue, Powell River, British Columbia, Canada V8A3L5

Most of the information on prey items recorded for Northern Shrike (*Lanius exubitor*) in British Columbia are of carcasses, or parts of carcasses, found impaled on sharp objects (Figure 1) or wedged in V-shaped forks of branches (R.W. Campbell pers. comm.). Since this caching behaviour is characteristic of shrikes, it has been assumed that the remains are the result of a successful hunting foray by a Northern Shrike. Loggerhead Shrike (*L. ludovicianus*) also occurs in British Columbia but it is rare and cached prey cannot be considered as a source of food (Campbell et al. 1997).



Figure 1. Most reported instances of Northern Shrike prey in British Columbia are of impaled or wedged remains, like this Black-capped Chickadee, found incidental to other field activities. *Photo by R. Wayne Campbell, Iona Island, BC, 14 February 1970. BC Photo 3748 (see Campbell and Stirling 1971).*

Direct observations of prey capture by Northern Shrike are extremely rare. For example, during 11 years of birding in the Creston valley, and amassing a personal database of 776 records, Van Damme (2011) only witnessed Northern Shrikes capturing prey on two occasions. Therefore, direct observations of predation by Northern Shrike are extraordinary and should be published.

On 20 October 2010, at 0900 hr on a clear day, I was birding on Tyee Spit, an estuarine spit at the confluence of Campbell River with Discovery Passage at Campbell River, BC. The area is a popular recreational destination with a RV site, boat launch, floatplane base, regional park, hiking trails, and patches of restored habitat for wildlife. In undisturbed upland areas, natural vegetation includes scattered pine trees (*Pinus* spp.), dense clumps of Wood's rose (*Rosa woodsii*), and a variety of tall grasses, including dunegrass (*Elymus mollis*).

During my field trip, I observed about 35 to 40 Savannah Sparrows (*Passerculus sandwichensis*) and three or four White-crowned Sparrow (*Zonotrichia leucophrys*) feeding on the ground in a loose aggregation in a semi-open habitat. An adult Northern Shrike was perched atop a pine tree nearby. The flock of sparrows suddenly flew and one bird flew higher than the others. The shrike flew into the air and chased the sparrow back to the ground where it was captured in tall grasses. The shrike then flew with its prey in its feet about 30 m over the spit for about 100 m to a nearby patch of tall rose shrubs.

I walked towards the site and soon saw that the shrike had wedged its prey in a narrow fork of a rose

branch about 46 cm (18 in) from the ground (Figure 2). I watched the shrike as it pecked the sparrow's head for a short time (Figure 3) and then walked to the shrub and identified the prey as a Savannah Sparrow.



Figure 2. Adult Northern Shrike wedging a Savannah Sparrow in a fork of a rose bush. Photo by Clyde H. Burton, Campbell River, BC, 20 October 2010. BC Photo 3749a.

Campbell et al. (1997) published a photo of a Savannah Sparrow impaled on a barbed-wire fence was also taken by a shrike in autumn migration.

There are no quantitative studies of the food habits of Northern Shrike on its breeding or wintering grounds in British Columbia. Campbell et al. (1997) provided the first list of suspected or known prey for British Columbia. Since then, additional reports have been received and these have been integrated into a current list of known and assumed food items. These include: unidentified earthworm (Van Damme 2011), unidentified insects, Willow Ptarmigan chick (*Lagopus lagopus*; Swarth 1926), Downy Woodpecker (*Picoides pubescens*), Hairy Woodpecker (*P. villosus*), Horned Lark (*Eremophila alpestris*), juvenile Gray Jay (*Perisoreus canadensis*), Skylark (*Alauda arvensis*), Black-capped Chickadee (*Poecile atricapillus*; see Figure 1), Chestnut-backed Chickadee (*P. rufescens*), Bushtit (*Psaltriparus minimus*), Bewick's Wren (*Thryomanes bewickii*), Golden-crowned Kinglet (*Regulus satrapa*), American Robin (*Turdus migratorius*), Varied Thrush (*Ixoreus naevius*),



Figure 3. Adult Northern Shrike eating wedged Savannah Sparrow. Photo by Clyde H. Burton, Campbell River, BC, 20 October 2010. BC Photo 3749b.

European Starling (*Sturnus vulgaris*), Bohemian Waxwing (*Bombycilla garrulus*), Yellow-rumped Warbler (*Dendroica coronata*), Spotted Towhee (*Pipilo maculatus*), American Tree Sparrow (*Spizella arborea*), Savannah Sparrow (see Campbell et al. 1997 for photo), Song Sparrow (*Melospiza melodia*), White-crowned Sparrow, Golden-crowned Sparrow (*Z. atricapilla*), Fox Sparrow (*Passerella iliaca*), Dark-eyed Junco (*Junco hyemalis*), Common Redpoll (*Carduelis flammea*), House Finch (*Carpodacus mexicanus*), Red Crossbill (*Loxia curvirostra*), American Goldfinch (*Carduelis tristis*), Evening Grosbeak (*Coccothraustes vespeertinus*), Snow Bunting (*Plectrophenax nivalis*), Lapland Longspur (*Calcarius lapponicus*), House Sparrow (*Passer domesticus*; Campbell 1988, Siddle 2010), Meadow Vole (*M. pennsylvanicus*; Van Damme 2011), Townsend's Vole (*Microtus townsendii*), Southern Red-backed Vole (*Clethrionomys gapperi*), and unidentified shrew (*Sorex* sp.).

Cade and Atkinson (2002) mention that although Northern Shrike has a varied diet, it feeds mainly on small birds and mammals, especially in winter. In British Columbia, prey of Northern Shrike, summer and winter, includes at least 32 species of birds and three species of mammals. †

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About the Author



Since he can recall, Clyde has always had an interest in birds. He vividly remembers his first bird book, *Birds of Canada* by Percy A. Taverner, which his mother bought from T. Eaton & Company for \$12.95 and gave it to him as a Christmas present in 1954. Since then, he has become active, mainly as a volunteer, in many natural history and conservation activities and was a primary contributor to the four-volume set *The Birds of British Columbia* (1990-2001). He has decades of natural history experience in the Powell River region and is frequently consulted by biologists to tap his knowledge.