



Field Observations of Northern Shrikes Preying on Meadow Voles in the Creston Valley, British Columbia

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Northern Shrike (*Lanius excubitor*) is a regular migrant and winter visitor to the Creston valley, in southeastern British Columbia, usually arriving in late September and departing by mid-to-late March (Van Damme 2009). Individual birds are seen in open habitats sitting atop a variety of shrubs and trees or perched on utility wires, fence posts, cattail stems (*Typha latifolia*), and great mullein stalks (*Verbascum thapsus*), searching for prey. Occasionally, this predatory passerine has also been observed hovering while hunting.

Between 2000 and 2011, I have recorded eight incidents (>1%; $n = 776$) involving prey items or predation by Northern Shrike and of these two were direct predation where prey capture was witnessed.

Six observations involving foods and feeding habits were:

1. On 22 January 2000, an adult Northern Shrike was observed ejecting a small pellet then retrieving a cached food item from a stand of cattails. The pellet was later retrieved and measured 2 cm x 1 cm.
2. On 17 November 2003, an adult Northern Shrike was observed eating an earthworm (Annelida).
3. On 30 November 2003, I chanced upon an adult Northern Shrike that had just caught a large vole (*Microtus* sp.) in a weedy patch and was eating it.
4. Two observations were recorded in January 2005. An adult Northern Shrike was seen flying with a vole in its feet and another was

seen flying with a vole in its bill. In the latter instance, the shrike flew across the Kootenay River and along its shore with the prey, a distance of about 250 m. By the time the shrike landed in a dense hawthorn tree, it had steadily lost altitude.

5. On 2 November 2010, an adult shrike was observed flying toward a stand of willows (*Salix* sp.) with a vole in its bill and while in flight, the vole was transferred to its feet.

Occasionally, I have found the impaled prey of shrikes in bushes but I have only twice observed the species actually hunting and killing prey. In one situation, I had the opportunity to photograph the sequence of events (Figures 1-5).

On 18 January 2003, an immature Northern Shrike was seen perched on a utility wire above a frozen irrigation ditch. The shrike flew from the wire and along the ditch, landing on the snow-covered road where a Meadow Vole (*Microtus pennsylvanicus*) was crouched. The shrike struck at the vole repeatedly to kill it, then picked it up in its bill, flew low along the irrigation ditch and cached the vole at the base of a willow shrub. The shrike then flew up to the utility wire where it preened.

Eight years later, on 7 March 2011, I again witnessed a successful prey capture, this time by an adult Northern Shrike. The predator-prey interaction took place on a rural dirt road paralleling a partially snow-covered hayfield to the south and a shrub dominated irrigation ditch to the north. I first sighted the shrike at 1554 hr perched atop a red-osier dogwood



Figure 1. This adult Northern Shrike spotted something from atop its nearby hunting perch and quickly flew to the site to investigate. *Photo by Linda M. Van Damme, Creston, BC, 7 March 2011.*

shrub (*Cornus stolonifera*) bordering the irrigation ditch. It obviously spotted something and flew from its perch and circled low over a snow patch before landing on the dirt roadway (Figure 1). I quickly noticed a small mammal on its hind legs on a patch of snow which appeared to be a barrier to protective



Figure 2. In an attempt to avoid capture by the Northern Shrike, the Meadow Vole tried to escape under the snow, but a thick crust prevented its escape. *Photo by Linda M. Van Damme, Creston, BC, 7 March 2011.*

cover. As the shrike was standing on the roadway, the Meadow Vole tried to “nose” into the hard snow (Figure 2). The shrike then flew up and hovered close to the vole, which had its head up but kept its body horizontal (Figure 3). The shrike landed on the snow where it appeared the vole would have to travel if it



Figure 3. The Northern Shrike hovered over its prey realizing the Meadow Vole could not escape into the hard snow. *Photo by Linda M. Van Damme, Creston, BC, 7 March 2011.*



Figure 4. In defense of its life, the Meadow Vole challenged the Northern Shrike by standing erect on the tip of its toes. *Photo by Linda M. Van Damme, Creston, BC. 7 March 2011.*

ran for cover. The shrike became airborne again and the vole stood on its hind legs as the shrike moved directly overhead. Again, the shrike landed on the ground and the vole remained on its hind legs facing it. The vole moved farther onto the roadway where it appeared more camouflaged against the gravelled surface. Meanwhile, the shrike landed again on the snow, intently watching the vole. Seconds later, the shrike hovered over the vole, which jumped up to challenge its attacker, one foot remaining on the ground (Figure 4). The shrike landed very close to the vole, which initially turned its body and faced the shrike but then ran over the snow in an effort to escape. This was a fatal mistake as the shrike was quickly able to catch and dispatch the vole. The prey was transported in the shrike's bill and wedged into the crotch of a dogwood branch (Figure 5).

My camera denotes the time of this event as 1554 to 1558 hr, a four-minute interval of riveting action from when I first sighted the Northern Shrike until it cached its prey.

The feeding behaviour I observed and photographed in the Creston valley (*e.g.*, sit and wait, hovering, and attack prey on ground) is typical hunting behaviour for Northern Shrike (McNicholl 1972, Cade and Atkinson 2002). †



Figure 5. The result of a successful prey capture by the Northern Shrike, the dead Meadow Vole was cached in the crotch of a dogwood shrub for later consumption. *Photo by Linda M. Van Damme, Creston, BC, 7 March 2011.*

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About the Author

Linda has a special interest in documenting the occurrence, abundance, breeding activity, and behavioural observations of birds in the Creston valley. Her updated birding booklet slated for publication in spring 2012 will include a site guide as well as a bird checklist of 303 species of which 172 are known to breed. Each season Linda collects hundreds of breeding records of local birds and is a 30-year contributor to the British Columbia Nest Record Scheme.