



NOTE

First report of *Scudderia f. furcata* (Tettigoniidae) and other noteworthy records of Orthoptera from New Brunswick

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Although a summary of the status of orthopteroid insects in Maritime Canada was presented recently by Scudder and Vickery (2010), compilations of new reports have subsequently expanded knowledge of the grasshoppers and allies of the region (McAlpine and Ogden 2012; Catling et al. 2013). Nonetheless, knowledge of the distribution, abundance, and conservation status of the Orthoptera of the Maritimes remains poor. Here we report additional new records significant to our understanding of the Orthoptera of New Brunswick.

***Melanoplus punctulatus punctulatus* (Scudder, 1863)**

NEW BRUNSWICK: York County: Currie Mountain, Douglas (45.98320 N, 66.75640W), 18 August-6 September 2013, C. Hughes & A Morrison, old *Pinus strobus* (Pinaceae) stand, Lindgren funnel trap in canopy of *Pinus strobus* (1 male, NBM 44699). **York County:** Odell Park, Fredericton (45.95390 N, 66.66660 W), 19 August-5 September 2013, V. Webster, hardwood stand, Lindgren funnel trap in canopy, (1 female, NBM 44701); **York County:** Currie Mountain, Douglas (45.98440 N, 66.75920W), 19 August-6 September 2013, C. Hughes & A Morrison, mixed forest with *Quercus rubra* (Fagaceae), Lindgren funnel trap in *Quercus rubra* canopy, (1 female, NBM 44702); **Queens County:** Canadian Forces Base Gagetown (45.75160 N, 66.18660W), 28 August-12 September 2013, C. Hughes & V. Webster, old mixed forest with *Quercus rubra*, Lindgren funnel trap in canopy of *Quercus rubra* (1 male, NBM 44670); **York County:** Currie Mountain, Douglas (45.98440 N, 66.75920W), 6-17 September 2013, K. Van Rooyen & V. Webster, mixed forest with *Quercus rubra*, Lindgren funnel trap at 1 m under *Quercus rubra*, (1 female, NBM 44698).

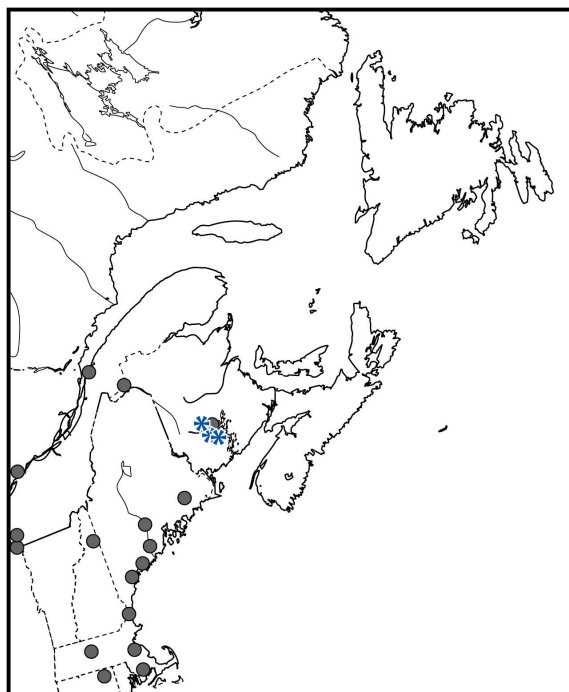
Melanoplus punctulatus (Orthoptera: Acrididae) is a poorly known species and is reported to be uncommon wherever it occurs (Vickery and Kevan 1985; Capinera et al. 2004). Catling et al. (2013) reported single specimens from Madawaska and York Counties, New Brunswick, the first for the Maritimes (Figure 1). The species is found in association with *Pinus* sp. and *Larix laricina* (Pinaceae) and is also reported from broadleaf trees (Capinera et al. 2004). It is apparently seldom observed below a height of 1 m (Vickery and Kevan 1985) and may be primarily nocturnal (Capinera et al. 2004). These aspects of its biology may account for the apparent rarity of *Melanoplus punctulatus*. It is noteworthy that four of the five specimens reported here were taken in Lindgren funnel traps placed in the forest canopy (see Hughes et al. 2014 for the methodology of trap installation). Collecting methods directed at canopy vegetation, especially where conifers are present, may reveal this species to be more abundant in the Maritimes than the limited number of records to date suggest.

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Figure 1. Distribution of *Melanoplus p. punctulatus* in Maritime Canada and adjacent jurisdictions. Asterisks (*) plot records reported here, closed circles (●) plot previous records from Vickery and Kevan (1985) and Catling et al. (2013).



***Scudderia furcata furcata* Brunner von Wattenwyl, 1878**

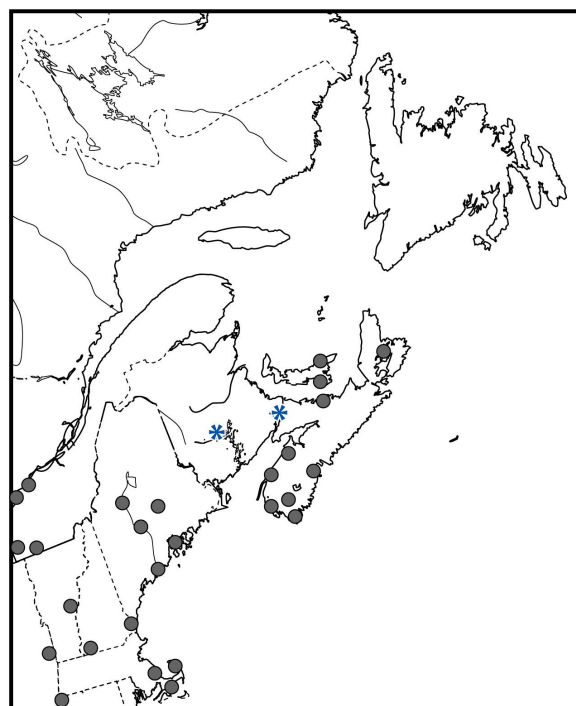
NEW BRUNSWICK: York County: Douglas (45.9998°N, 66.7644°W), 27 August 2011, D.L. Sabine, perennial garden in rural subdivision, net sweeping, (1 male, NBM 44649); **Westmorland County:** High Marsh Road, Sackville (45.9249° N 64.2993° W), 21 August 2012, S. Tingley, on *Solidago* sp. in wet ditch adjacent to hayfield (1 female, photo only; Figure 2).

Records mapped by Vickery and Kevan (1985) suggest that *Scudderia f. furcata* (Orthoptera: Tettigoniidae) is widespread and probably not infrequent in Nova Scotia (being present even on Cape Breton Island) and northern New England (Figure 3). Catling et al. (2013) reported the species for the first time from Prince Edward Island from three sites in two counties. However, the species has not been reported previously for New Brunswick. *Scudderia f. furcata* is often observed in association with marshy areas (Vickery and Kevan 1985). One of the records reported here, and

Figure 2. A) *Scudderia f. furcata*, High Marsh Road, Sackville, New Brunswick. B) Detail of ovipositor. **Photo credit:** S. Tingley.



Figure 3. Distribution of *Scudderia f. furcata* in Maritime Canada and adjacent jurisdictions. Asterisks (*) plots records reported here, closed circles (●) plot previous records from Vickery and Kevan (1985) and Catling et al. (2013).



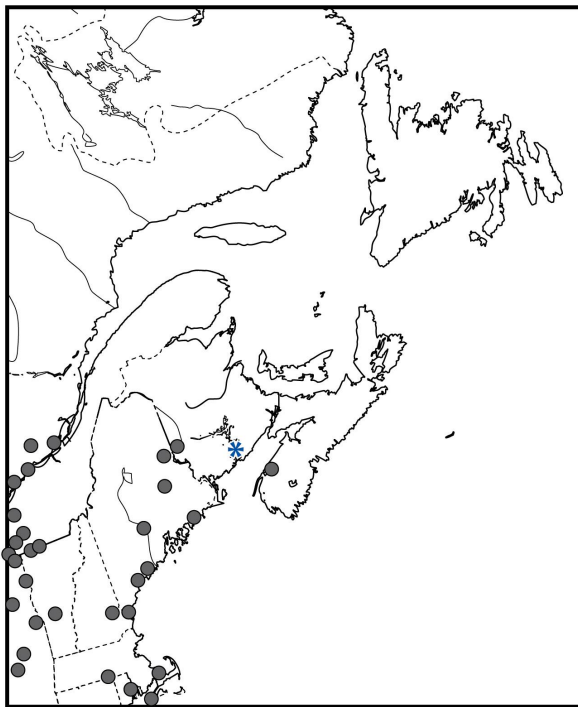
those of Catling et al (2013), support this. Our York County record suggests a more broad-based selection of habitat.

***Neoconocephalus ensiger* (Harris, 1841)**

NEW BRUNSWICK: Kings County: French Village, Rothesay (45.3859°N, 65.9510°W), 27 September 2014, J.H. Lewis, on shrubbery in suburban yard, by hand when calling at night, (1 male, NBM 44669).

Neoconocephalus ensiger (Orthoptera: Conocephalidae) is apparently at its northernmost distribution limit in the Maritimes. Vickery and Kevan (1985) plot single records for southwestern Nova Scotia and the New Brunswick border adjacent to Maine (Figure 4). While it appears to be an uncommon species in the region, the limited investigations of Orthoptera to date in the Maritimes make it impossible to assess conservation status for this species with confidence.

Figure 4. Distribution of *Neoconocephalus ensiger* in Maritime Canada and adjacent jurisdictions. Asterisks (*) plot records reported here, closed circles (●) plot previous records from Vickery and Kevan (1985).



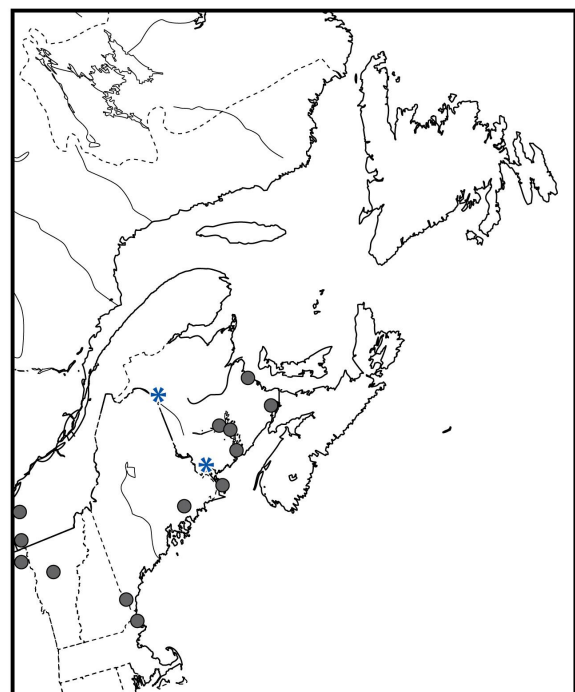
***Roeseliana roeselii* (Hagenbach, 1822)**

NEW BRUNSWICK: Charlotte County: Flume Ridge, (45.4787° N, 67.0549° W), 15 July 2013, D.L. Sabine, old field, net sweeping (3 specimens, 2 females, 1 male, NBM 44753); **Victoria County:**

Four Falls, (46.8377° N, 67.7354° W), 12 July 2014, J.H. Lewis, old field, net sweeping, (1 male, NBM 44498).

Roeseliana roeselii (Orthoptera: Tettigoniidae) is a European species believed introduced to North America at Montreal about 1952 (Kevan 1961). McAlpine (2009) reported the first Maritime occurrence from Saint John, New Brunswick. Since then, additional records and observations suggest the species is widespread and sometimes abundant in old-field habitats across, at least, the southern half of New Brunswick east to the Nova Scotia border (Catling et al. 2013). New Brunswick records from Wood Island, well offshore in the Bay of Fundy (McAlpine and Ogden 2012), demonstrate the dispersal capabilities of this species and the Victoria County record reported here is evidence of the now widespread distribution of this species through much of the St. John River Valley (Figure 5). Nonetheless, searches of apparently ideal habitat for *Roeseliana roeselii* by DLS in, albeit a limited part of, southwestern Nova Scotia has failed to turn up this species. This suggests that there remains room for further range expansion by *Roeseliana roeselii* in the Maritimes.

Figure 5. Distribution of *Roeseliana roeselii* in Maritime Canada and adjacent jurisdictions. Asterisks (*) plot records reported here, closed circles (●) plot previous records from Vickery and Kevan (1985), McAlpine (2009), McAlpine and Ogden (2012) and Catling et al. (2013).



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