

SCIENTIFIC NOTE

Chaetophora spinosa (Coleoptera: Byrrhidae): New Records from the Maritime Provinces of Canada

The adventive byrrhid, *Chaetophora spinosa* (Rossi 1794), was first reported in North America by Leng (1917) from specimens collected in New York. It is a Palearctic species found throughout much of Europe, south to Turkey (Johnson 2002). Johnson (1990) subsequently reported records from Ohio north to southern Ontario and Quebec, east across New York State and thence north to southern Maine. A second introduced population straddles the Idaho – British Columbia border.

Lesveque and Lesveque (1994) found *C. spinosa* to be abundant in both pitfall and flight-intercept traps near Sherbrooke in southern Quebec. In Idaho, Johnson (1990) found the species associated with the mosses *Pohlia atropurpurea* (Wahl.) H. Lind, *Dicranella varia* (Hedw.) Schimp., *Aloina brevisrostris* (Hook. and Grev.) Kind., and the alga *Nostoc* sp. On Prince Edward Island Majka *et al.* (2006) found it associated with the moss *Mnium hornum* Hedw. Johnson (1990) characterized *C. spinosa* as synanthropic, inhabiting the cultural steppe associated with anthropogenic activities.

Recently (2003–2005) Majka *et al.* (2006) reported the species from several locations on Prince Edward Island, the first records in Atlantic Canada. In one agricultural field, beetles were present at a density of 10 individuals/m². Majka *et al.* (2006, pp. 27) drew attention to the absence of records from both adjacent mainland provinces, New Brunswick and Nova Scotia. In relation to colonization and dispersal, they raised both the possibility of autonomous wind-borne dispersal from southern Maine, as well as a separate introduction event that may independently have brought the species to this region. Since then, additional

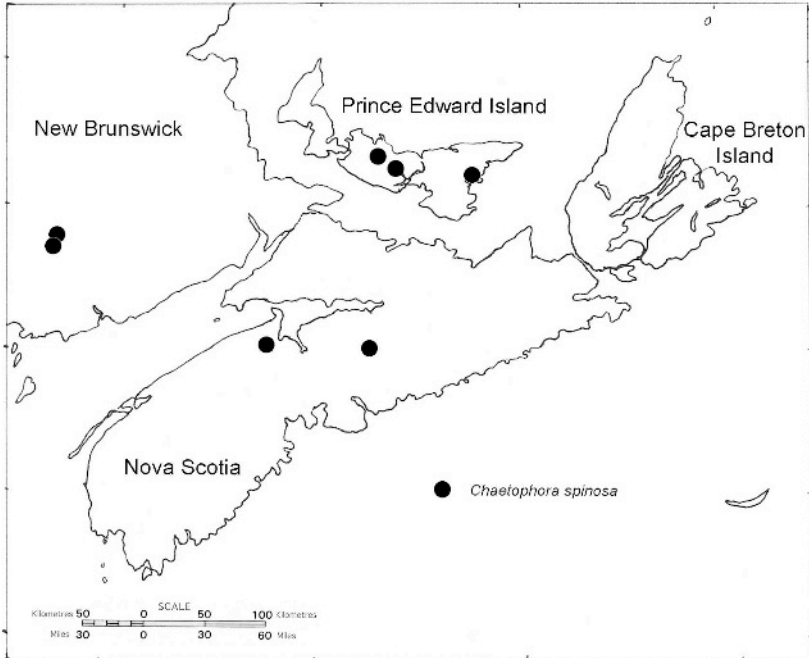


Fig. 1. Distribution of *Chaetophora spinosa* in the Maritime Provinces of Canada.

records of *C. spinosa* have come to light that establish the presence of the species in both provinces.

NEW BRUNSWICK: York Co.: Fredericton (45.9588°N, 66.6254°W), 7.vi.2005, R.P. Webster, in flood debris along river, R.P. Webster collection; Charters Settlement (45.8430°N, 66.7275°W), 5.vi.2007, R. P. Webster, in garden, R. P. Webster collection. **NOVA SCOTIA: Colchester Co.:** Shubenacadie, 27.vi.2005, J. Gordon, flight-intercept trap, Nova Scotia Dept. of Natural Resources collection; Shubenacadie, 2.vi.2006, J. Ogden, flight-intercept trap, Nova Scotia Dept. of Natural Resources collection; **Kings Co.:** Kentville, 29.vi.1961, D. H. Webster, open soil of meadow path, D. H. Webster collection.

The collection sites in the Maritime Provinces are shown in (Fig. 1). Although these results are preliminary, and do not result from a systematic program to ascertain the extent of the species' distribution, it is clear that *C. spinosa* is widely-distributed in the region and has been present since at least 1961. In Nova Scotia a second adventive, Palearctic byrrhid also occurs. *Simplocaria semistriata* (Fabricius 1794) was first introduced to North America in 1913 through the port of Halifax (Johnson 1990). This discovery underscores the importance of monitoring programs which can detect changes in the distribution of introduced species colonizing new areas and environments. Further research in the Maritime Provinces would be desirable to determine the extent of its distribution and its bionomics in such cultural-steppe environments.

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