

THE BLACK WITCH MOTH – A RARE PRAIRIE VISITOR

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In early August 2020, I was asked to confirm the identity of a huge moth photographed on an acreage just south-east of Saskatoon. To my great surprise (and pleasure) the specimen was a black witch moth (BWM) (*Ascalapha odorata* (Linnaeus 1758)), marking only the second occasion in over 50 years of living in the province that I had seen one (Figure 1).

The BWM is a member of the family Erebidae in the superfamily Noctuoidea (more familiar to us as the group to which cutworms belong) and is endemic to the southern United States, Hawaii, the Caribbean, and South America as far south as central Argentina.^{1,2} This dark brown to black moth is the largest noctuid in North America, with females having a wingspan up to 17 cm (males usually a few centimetres less [Figure 2]), resulting in their sometimes being mistaken for bats at first glance.^{1,2}

Carried north on strong winds (especially those of tropical storms) in mid to late summer, the BWM is an occasional visitor to Canada, having been recorded from all provinces except Prince Edward Island and the Territories.^{3,4}

In the Prairie provinces, reports of the BWM are few and far between. For Manitoba, I have been unable to find many reports of sightings, though the province can claim the record for the most northerly sighting: a BWM was collected just east of Churchill (58° 46' N) in 2006, beating the old North American



FIGURE 1. The black witch moth photographed on 4 August 2020 south-east of Saskatoon. The specimen, with a wingspan approaching 16 cm, is very likely a female, based on the white 'necklace' pattern that runs across the forewings. The somewhat tattered appearance of the wings is typical, reflecting the battering these insects receive as they are blown northward. Photo credit: Philip Griebel.

record from Auke Bay, Juneau, Alaska (58° 23' N), set in 1957, by a few kilometres.⁵ Though a BWM was found in Manitoba as early as 1900, it is Alberta that holds the record for the earliest collection date — May 1897 in Calgary.^{6,7} This is a most interesting report which, if correct, is easily the earliest date for the species in Canada, beating by a good month other early sightings (e.g., Point Pelee National Park, Ontario, 15 June; Altamont, Manitoba, 28 June; Black Diamond, Alberta, 30 June). However, there are more reports of the moth in Alberta, compared to Manitoba, perhaps due to a greater number of Lepidoptera collectors and photographers, both professional and amateur, to be found here. Though most of the Alberta records are from Calgary and further south, several moths have been taken in Edmonton and vicinity, representing the northerly extreme for the province.

Saskatchewan records for the BWM now number 20 since the first moth was taken in 1945 in Saskatoon (unfortunately,

the collector of this specimen is unnamed).⁸ A 2018 compilation of records by Saskatchewan's 'Moth Guru' (John Koziol) listed only 14 occurrences, including the one reported by Ron Hooper in *Blue Jay*.^{9,10} However, this list has now been amended to 20, mainly due to the addition of 2019 and 2020 sightings. Sites where moths were observed were Regina (5), Indian Head, Hodgeville, White Bear, Saskatoon (2), Fort Qu'Appelle, Bjorkdale area (2), Porcupine Plain (2), St Victor, Assiniboia, Spring Valley, Dirt Hills (near Claybank) and Prince Albert. The latter record, simply a report and photograph in the *Prince Albert Herald*, likely in the 1980s, is the province's northernmost sighting.⁹ Most of these BWMs were seen in July, with fewer in August and one in September.

What struck me most as I examined the records for the Prairie provinces was the increased number of sightings in recent years compared to the late 1900s and early 2000s. For example, in 2020 alone, there were two reports from



FIGURE 2. A male black witch moth resting on a tree trunk, photographed on 3 July 2020 at Dirt Hills near Claybank. Its wingspan was about 13 cm, and its wings show no sign of the 'necklace' seen in females. Photo credit: Richard Geber.

Manitoba (Winnipeg and Riding Mountain National Park), four from Saskatchewan (Saskatoon, Regina, Spring Valley and Dirt Hills), and six from Alberta (Calgary [two], Lacombe, Taber, Stafford Park and Fort MacLeod).¹¹⁻¹⁵ Some of this 'trend' can be put down to the provinces' increased (human) populations and hence the greater likelihood of BWM vagrants being encountered. However, it is tempting to attribute some of this increase to climate change, in particular the increased frequency and violence of tropical storms bringing the moth far to the north of its normal range.

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