



## **Records of Eastern Tailed Blue Butterfly (Lepidoptera: Lycaenidae) from the West Kootenay region, British Columbia**

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The Eastern Tailed Blue (*Cupido comyntas*) is a small butterfly in the family Lycaenidae that is widespread east of the Rocky Mountains but occurs in scattered populations in the west (Pyle 1981). The populations in British Columbia, Washington and Oregon have been named subspecies *pacnowe* (Scott and Kondla *in* Scott et al. 2006), which has been synonymized with subspecies *sissona* (from northern California) by Pelham (2008). Guppy and Shepard (2001) reported only three known populations of this species in BC: Vernon area (Okanagan Valley), Pend d'Oreille Valley (West Kootenay), and the Flathead drainage (East Kootenay). Due to the small number of records of occurrence in the province, Eastern Tailed Blue is currently classified as vulnerable (Blue-listed) by the British Columbia Conservation Data Centre (BC Conservation Data Centre 2013a). This note summarizes historical records, previously published and unpublished, for the West Kootenay region and reports more recent observations gathered during butterfly studies in 2012 and 2013.

### **West Kootenay Records 1997–2007**

The first records of Eastern Tailed Blue from the West Kootenay were reported by Guppy and Shepard (2001) from the Pend d'Oreille Valley (POV) southeast of Trail, on 12 July 1997 and 4 July 1998 (Guppy and Shepard 2001:372). Subsequent reports from the POV included records in each year from 1998 to 2007; dates ranged from 9 May through 11 September for all years combined, however, most of the observations occurred in May and July (Kondla

1999, 2004; N. Kondla, pers. comm.). The hot, dry summer of 1998 was particularly good for Eastern Tailed Blue, and more than 25 males were encountered on 4 and 8 July (N. Kondla, pers. comm.). Outside of the POV, Eastern Tailed Blue was found near Castlegar at Brilliant (date not available, Kondla 1999) and Genelle (29 August 1999, N. G. Kondla, pers. comm.), and in the Fort Shepherd Conservancy Area (FSCA) immediately west of POV on 15 May 2007 (N. Kondla, pers. comm.). I am not aware of any West Kootenay records of this species from 2008 to 2011.

### **West Kootenay Records 2012 & 2013**

In 2012 I conducted butterfly inventories in the POV from Seven Mile Dam downstream to Waneta, as well as along the Columbia River from Beaver Creek to Waneta on the east side and within the Fort Shepherd Conservation Area (FSCA) on the west (Arndt 2012). Blue-listed species were the focus of the inventories in 2012. As Eastern Tailed Blue was not on the Blue List at the time of the inventories (BC Conservation Data Centre 2012), it did not receive full treatment in the project report (Arndt 2012). The 2013 review of the status of butterflies in the province returned Eastern Tailed Blue to the Blue List (BC Conservation Data Centre 2013b) and records from the 2012 study are provided here.

Eastern Tailed Blue is very difficult to distinguish from Western Tailed Blue (*C. amyntula*; Figures 1 and 2). Easterns are generally smaller than Westerns, and on the undersides are grayer with a more distinct pattern of dark markings (Pyle 1981).



**Figure 1.** Eastern Tailed Blue near Nelson, 22 June 2012. *Photo by Bethany Arndt.*



**Figure 2.** Western Tailed Blue near Nelson, 29 May 2012. *Photo by Janice Arndt.*

Easterns fly later into the summer than Westerns because they are multi-brooded, whereas Westerns rear only one generation each year in BC (Kondla 1999). Identification of individual Eastern Tailed Blues was confirmed by entomologists Norbert Kondla or Jon Shepard when specimens or photographs were available. Identification of tailed blues that were netted but not collected was based on a combination

of characteristics, including size, pattern and date of observation.

I encountered Eastern Tailed Blue nine times at five sites in the POV between 15 May and 6 August 2012, and at two sites in FSCA, on 25 August 2012 (Table 1). Field effort from May through August in 2012 included approximately 60 hours in the POV and 30 hours along the Columbia River (including

**Table 1.** Records of Eastern Tailed Blue from the West Kootenay obtained in 2012 and 2013. Note: all records were made by J.E. Arndt.

Date	Location	Lat., – Long.	Number	Record type
15 May 2012	POV; near Waneta	49.005, -117.598	3	Photo
15 May 2012	POV; old lane	49.022, -117.534	1	Specimen
22 Jun 2012	Nelson; north shore	49.521, -117.282	1	Photo
16 Jul 2012	POV; beside cemetery	49,006, -117.604	3	Specimen
16 Jul 2012	POV; Goose Flats	49.011, -117.553	1	Sight
16 Jul 2012	POV; near Waneta	49.005, -117.598	1	Sight
26 Jul 2012	POV; beside cemetery	49,006, -117.604	2	Sight
26 Jul 2012	POV; near Waneta	49.005, -117.598	1	Sight
26 Jul 2012	POV; above Waneta Dam	49.007, -117.612	4	Sight
6 Aug 2012	POV; beside cemetery	49,006, -117.604	1	Specimen
10 Aug 2012	Nelson; north shore	49.521, -117.282	1	Photo
25 Aug 2012	FSCA; along main road	49.050, -117.618	1	Specimen
25 Aug 2012	FSCA; beside river	49.034, -117.618	1	Photo
4 Jun 2013	POV; near campground	49.043, -117.491	1	Photo

FSCA). In addition to the POV and FSCA inventories, I surveyed butterflies opportunistically (approximately 40 hours) along a power-line right-of-way near Nelson. Two Eastern Tailed Blues were observed in 2012 (Table 1).

In 2013 I conducted a life-history study in the POV of another Blue-listed butterfly, Common Checkered Skipper (*Pyrgus communis*; Arndt 2013). Field time in the POV in 2013 was about 40 hours and fewer habitat types were visited in 2013 than in 2012. Columbia River sites were not visited in 2013. Only one Eastern Tailed Blue was seen in the POV, on 4 June 2013. No Eastern Tailed Blues were detected in the Nelson area in 2013 during approximately 30 hours of observation.

In summary, Eastern Tailed Blue has persisted in the Pend d'Oreille Valley since its discovery there in 1997. In addition, small numbers have been found occasionally in other areas of the southern West Kootenay region, including Castlegar and Nelson. Although historically reported to occur in the Vernon area of the Okanagan valley (10 June 1969, J.H. Shepard, pers. comm.), Threatful (2003) did not record Eastern Tailed Blue there between 1970 and 2002. To my knowledge, there have been no reports of this species in the East Kootenay since 1991. In BC, Eastern Tailed Blue is known to occur regularly only in the West Kootenay region (BC Conservation Data Centre 2013b). †

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***About the Author***



Janice is a birder and wildlife biologist living in the Nelson area. She has enjoyed adding the study of butterflies to her areas of personal interest and professional research.