

## Checklist of the Yellowjacket and Paper Wasps of British Columbia

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This revised list includes 18 species of wasps of the subfamilies Vespinae (yellowjackets and hornets) and Polistinae (paper wasps) of the Family Vespidae (Order Hymenoptera) recorded in British Columbia. It replaces Cannings (2008), a version that was largely based on Akre *et al.* (1980) and the taxonomy of Buck *et al.* (2008). There are no species new to the province listed, but many name changes have occurred, mostly the result of studies splitting Holarctic species into their Nearctic and Palaearctic components. Nomenclature follows Kimsey and Carpenter (2012), the best and most recent source for the taxonomy of the North American fauna. Buck *et al.* (2008) and Akre *et al.* (1980) remain useful sources of information; distributional data are mostly from these papers. English names are a mixture of those used in Akre *et al.* (1980) and BugGuide (<https://bugguide.net>). Krombein (1979) is a good source for the older literature.

Subfamily Vespinae: yellowjacket wasps (*Dolichovespula*, *Vespula*) and hornets (*Vespa*)

*Dolichovespula albida* (Sladen). Arctic Yellowjacket. Alaska east through the Northwest Territories to Newfoundland, south to Maine and the northern parts of the Canadian provinces to the west. Formerly treated as conspecific with *D. norvegica* (Fabricius), which is now considered a strictly Eurasian species.

*Dolichovespula alpicola* Eck. Rocky Mountain Yellowjacket. Alaska east to Alberta, south to Arizona and New Mexico.

*Dolichovespula arctica* (Rohwer). Parasitic Yellowjacket. Alaska east through the Northwest Territories to Newfoundland, south to Georgia, Illinois, North Dakota, New Mexico, Arizona and California. An obligate social parasite of *D. arenaria* and *D. alpicola*. Formerly recorded as *D. adulterina* (du Buysson), a name now restricted to a close Eurasian relative.

*Dolichovespula arenaria* (Fabricius) Aerial Yellowjacket. Alaska east through the Northwest Territories to Newfoundland, south to Georgia, Illinois, Iowa, Nebraska, New Mexico, Arizona and California.

*Dolichovespula maculata* (Linnaeus) Bald-faced Hornet. Alaska east through the Northwest Territories to Newfoundland, south to Florida, Texas, North Dakota; south to New Mexico, Arizona and California in the western mountains.

*Dolichovespula norvegicoides* (Sladen). Northern Yellowjacket. Alaska east through the Northwest Territories to Newfoundland, south to South Carolina and Tennessee in the Appalachians; Michigan, Wisconsin, North Dakota; south in the western mountains to Wyoming, Idaho and California.

*Vespa simillima* Smith. Japanese Yellow Hornet. An adventive species from Asia reported once from Vancouver Island; not established. The relevant subspecies is *V. s. xanthoptera* Cameron, from Japan. (Cannings 1989).

- Vespula acadica* (Sladen). Forest Yellowjacket. Alaska east through the Northwest Territories to Newfoundland, south to North Carolina, Wisconsin and Nebraska; south in the western mountains to New Mexico, Arizona and California.
- Vespula alascensis* (Packard). Common Yellowjacket. Alaska east through the Northwest Territories to Newfoundland, south to Georgia, Illinois, Iowa and Nebraska; south in the western mountains to New Mexico, Arizona and California. Previously known in North America as *V. vulgaris* (Linnaeus), from which it has been split; *V. vulgaris* is now considered restricted to the Palaearctic.
- Vespula atropilosa* (Sladen). Prairie Yellowjacket. British Columbia and Alberta south to New Mexico, Arizona and California.
- Vespula consobrina* (de Saussure). Blackjacket. Southern Alaska and Yukon east through the Northwest Territories to Newfoundland, south to Georgia, Illinois and North Dakota; south in the western mountains to Colorado, Utah and California.
- Vespula germanica* (Fabricius). German Yellowjacket. A European species introduced to numerous places around the world. Recorded in eastern North America in the 1960s; reached southern British Columbia by the mid-1980s (Gerber 1990). Vermont to Maryland, west to Indiana and Wisconsin; British Columbia south to California.
- Vespula infernalis* (de Saussure). Cuckoo Yellowjacket. Alaska east through the Northwest Territories to Newfoundland, south to New Jersey, Wisconsin and North Dakota; south in the West to New Mexico, Arizona and California. Known formerly as *V. austriaca* (Panzer) in North America; *V. austriaca* is now considered a palaeartic species. *Vespula infernalis* is an obligate social parasite of *V. acadica*.
- Vespula intermedia* (du Buysson). Northern Red-banded Yellowjacket. Alaska east through the Northwest Territories to Newfoundland, south to New England and the northern regions of the Canadian provinces to the west. Often reported in North America as *V. rufa* (Linnaeus), a name now restricted to Eurasian populations.
- Vespula pensylvanica* (de Saussure). Western Yellowjacket. British Columbia east to Manitoba and Wisconsin, south to Nebraska, Colorado and Texas; Baja California.

Subfamily Polistinae: paper wasps

- Mischocyttarus flavitarsis* (de Saussure). Western Paper Wasp. British Columbia south to Texas and California.
- Polistes aurifer* de Saussure. Golden Paper Wasp. British Columbia and Alberta south to Texas and California; northern Mexico; introduced to Hawaii and Society Islands. Formerly considered a subspecies of *P. fuscatus* (Fabricius), an eastern North American species.
- Polistes dominula* (Christ). European Paper Wasp. Eurasia, North Africa. Introduced to eastern North America in the 1970s; reached British Columbia by 2003 (Borkent and Cannings 2004).

## References

- Akre, R.D., A. Greene, J.F. MacDonald, P.J. Landolt and H.G. Davis. 1980. Yellowjackets of America north of Mexico. Agriculture Handbook No. 552. U.S. Department of Agriculture, Washington, DC.
- Borkent, C.J. and R.A. Cannings. 2004. *Polistes dominulus* (Christ) (Hymenoptera: Vespidae: Polistinae) in British Columbia: First collection records of an invasive European paper wasp in Canada. Journal of the Entomological Society of British Columbia 101: 99-100.
- Buck, M., S.A. Marshall and D.K.B. Cheung. 2008. Identification atlas of the Vespidae (Hymenoptera, Aculeata) of the northeastern Nearctic region. Canadian Journal of Arthropod Identification.  
[http://www.biology.ualberta.ca/bsc/ejournal/bmc\\_05/bmc\\_05.html](http://www.biology.ualberta.ca/bsc/ejournal/bmc_05/bmc_05.html)
- Cannings, R.A. 1989. An Asian Hornet, *Vespa simillima xanthoptera* (Hymenoptera: Vespidae) in North America. Journal of the Entomological Society of British Columbia 86: 91.
- Cannings, R.A. 2008. Checklist of the yellowjacket and paper wasps of British Columbia. 2008. In Klinkenberg, B. (Editor), 2010. E-Fauna BC: Electronic Atlas of the Fauna of British Columbia [[www.efauna.bc.ca](http://www.efauna.bc.ca)]. Lab for Advanced Spatial Analysis, Department of Geography, University of British Columbia, Vancouver, BC.  
<http://www.geog.ubc.ca/biodiversity/efauna/documents/YellowjacketPaperWaspsofBCCannings.pdf>.
- Kimsey, L.S. and J.M. Carpenter. 2012. The Vespinae of North America (Vespidae, Hymenoptera). Journal of Hymenoptera Research 28: 37-65.  
<https://doi.org/10.3897/jhr.28.3514>
- Gerber, H.S. 1990. Note on the occurrence of *Paravespula germanica* (Hymenoptera: Vespidae) in the Lower Fraser Valley of British Columbia. Journal of the Entomological Society of British Columbia 87: 73-74.
- Krombein, K.V. 1979. Superfamily Vespoidea. Pp 1469-1522, in K.V. Krombein, P.D. Hurd, Jr., D.R. Smith and B.D. Burks (eds.). Catalogue of Hymenoptera in America north of Mexico. Volume 2, Apocrita (Aculeata). Smithsonian Institution Press, Washington DC.