# Helpful, Hopeful, Wonderful:

(List compiled by Claudia Copley)

Call or email me anytime with your invertebrate questions: ccopley@royalbcmuseum.bc.ca 250 812-7523

### **Online Content:**

"Bringing Nature Home" video of Doug Tallamy: <a href="https://m.youtube.com/watch?v=F8EAAwdODhE">https://m.youtube.com/watch?v=F8EAAwdODhE</a>

**The Xerces Society for Invertebrate Conservation**: an international non-profit organization that protects wildlife through the conservation of invertebrates and their habitats. Amazing, free, downloadable resources!

**BugGuide.Net** <a href="https://bugguide.net/node/view/15740">https://bugguide.net/node/view/15740</a>: identification, images, & information for insects, spiders & their kin for the United States & Canada.

**E-Fauna BC** provides information on the wildlife species of British Columbia. Also an E-Flora site for plants-check it out too!

**Linda A. Gilkeson West Coast Gardening** <a href="http://www.lindagilkeson.ca/gardening\_tips.html">http://www.lindagilkeson.ca/gardening\_tips.html</a> tips, and tricks, and pests, and everything else about gardening in our region. Sign up for her enewsletter.

CRD "natural-gardening" site: provides information on pests, gardening with nature, beneficial insects, etc.

### **Books:**

Backyard Bounty: The Complete Guide to year-Round Organic Gardening in the Pacific Northwest (2018) by Linda A. Gilkeson: The title says it all!

A Sting in the Tale (2014) by Dave Goulson: This book documents one of the UK's most respected conservationists and the founder of the Bumblebee Conservation Trust's passionate drive to reintroduce shorthaired bumblebee to England.

A Buzz in the Meadow (2015) by Dave Goulson: Goulson tells the story of how a derelict farm in the heart of rural France, together with 33 acres of surrounding meadow, became a place for bumblebees and a myriad of other insects to thrive.

Wilding: The Return of Nature to a British Farm (2019) by Isabella Tree: The story of the 'Knepp experiment', a pioneering rewilding project in West Sussex, using free-roaming grazing animals to create new habitats for wildlife. Part gripping memoir, part fascinating account of the ecology of our countryside, this is, above all, an inspiring story of hope.

Animal, Vegetable, Miracle: A Year of Food Life (2017) by Barbara Kingsolver: Read about how, for one year, the author and her family only bought food raised in their own neighborhood or that they grew themselves. The Omnivore's Dilemma: A Natural History of Four Meals (2007) by Michael Pollan: Brilliant and eye-opening exploration of our food choices. Pollan launched a national conversation about what we eat and the profound consequences that even the simplest everyday food choices have on both ourselves and the natural world.

## **Information About Pests:**

**Spotted Wing Drosophila** <a href="https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/animals-and-crops/plant-health/insects-and-plant-diseases/tree-fruits/spotted-wing-drosophila">https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/animals-and-crops/plant-health/insects-and-plant-diseases/tree-fruits/spotted-wing-drosophila</a>

Large Yellow Underwing <a href="https://www.fs.usda.gov/Internet/FSE\_DOCUMENTS/fsbdev2\_037813.pdf">https://www.fs.usda.gov/Internet/FSE\_DOCUMENTS/fsbdev2\_037813.pdf</a>

Wireworms https://www.westcoastseeds.com/blogs/garden-wisdom/wireworms

Winter Moth <a href="https://aq.umass.edu/landscape/fact-sheets/winter-moth-identification-management">https://aq.umass.edu/landscape/fact-sheets/winter-moth-identification-management</a>
Cabbage White Butterfly <a href="https://www.growveg.com/guides/cabbage-white-butterflies-how-to-avoid-a-brassica-massacre/">https://www.growveg.com/guides/cabbage-white-butterflies-how-to-avoid-a-brassica-massacre/</a>

**Carrot Rust Fly** <a href="https://learn.eartheasy.com/articles/carrot-rust-fly-combat-this-carrot-killer-using-a-few-simple-tricks/">https://learn.eartheasy.com/articles/carrot-rust-fly-combat-this-carrot-killer-using-a-few-simple-tricks/</a>

**Imported Currantworm** <a href="https://pnwhandbooks.org/insect/small-fruit/currant-gooseberry/currant-gooseberry-imported-currant-worm">https://pnwhandbooks.org/insect/small-fruit/currant-gooseberry/currant-gooseberry-imported-currant-worm</a>

Tent Caterpillars <a href="https://www.canada.ca/en/health-canada/services/pest-control-tips/tent-caterpillars.html">https://www.canada.ca/en/health-canada/services/pest-control-tips/tent-caterpillars.html</a>
<a href="https://www.canada.ca/en/health-canada/services/pest-control-tips/aphids.html">https://www.canada.ca/en/health-canada/services/pest-control-tips/aphids.html</a>

		Order?	Metamorphosis?		Pairs of Wings?		Mouthparts?	
Slide	9		Incomplete	<b>)</b> Complete	1	2	Chewing/biting	Piercing/sucking
Slide	10		Incompiete	Complete	1	2	Chewing/biting	Piercing/sucking
Slide	11		Incomplete	Complete	1	2	Chewing/biting	Piercing/sucking
Slide	12		Incomplete	Complete	1	2	Chewing/biting	Piercing/sucking
Slide	13		Incomplete	Complete	1	2	Chewing/biting	Piercing/sucking
Slide	14		Incomplete	Complete	1	2	Chewing/biting	Piercing/sucking
Slide	15		Incomplete	Complete	1	2	Chewing/biting	Piercing/sucking
Slide	16		Incomplete	Complete	1	2	Chewing/biting	Piercing/sucking
Slide	17		Incomplete	Complete	1	2	Chewing/biting	Piercing/sucking
Slide	18							
Slide	19							
Slide	20		Insect Orders – "Know Your Insects"					

# 70%

Order Archaeognatha Blattodea Coleoptera Dermaptera Diptera Embioptera Ephemeroptera Grylloblattodea Hemiptera Hymenoptera Blattodea Lepidoptera Mantophasmatodea Mantodea Mecoptera Megaloptera Neuroptera Odonata Orthoptera Phasmatodea Plecoptera Psocodea Raphidioptera Siphonaptera Strepsiptera Thysanoptera Thysanura Trichoptera Zoraptera

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