

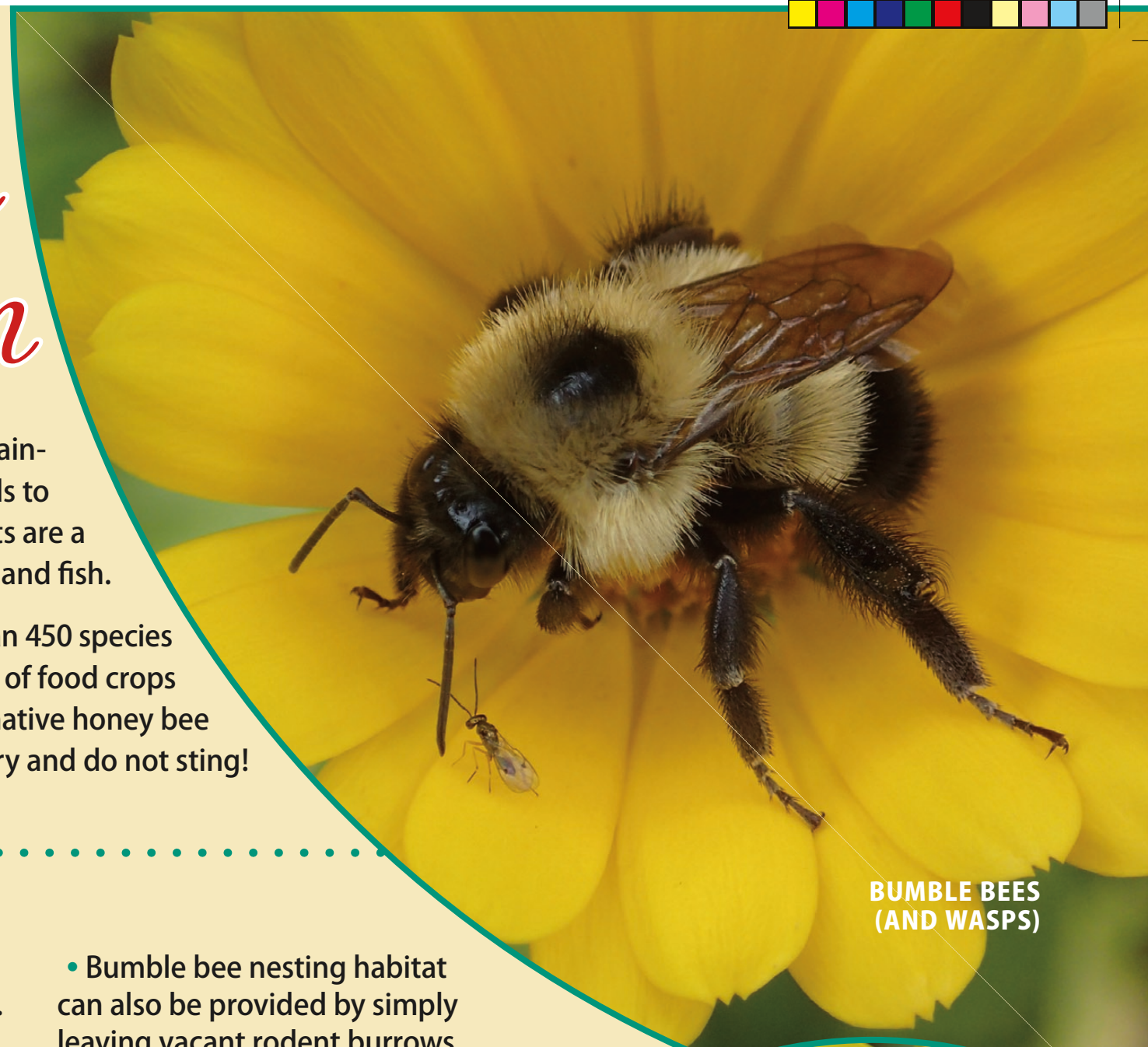
# Protecting Native Pollinators in the Columbia Basin



BEE ON CAMAS

**Native Pollinators** are essential to natural ecosystems. They help maintain healthy, productive native plant communities. Many animals, from birds to grizzly bears depend on insect-pollinated fruits and seed. Pollinating insects are a central part of the food web, being food themselves for birds, spiders, bats and fish.

**Bees** are the most important group of pollinators. There are more than 450 species of native bees in British Columbia. Bees play a critical role in the pollination of food crops and provide important additional pollination services in areas where non-native honey bee populations are in decline. Most of British Columbia's native bees are solitary and do not sting!



BUMBLE BEES (AND WASPS)

## Meet the Pollinators



SMALL CARPENTER BEES



LEAFCUTTER BEES



MASON BEES

### GROUND-NESTING BEES

About 70% of native bees, including bumble bees, sweat bees, mining bees, and long-horned bees, nest in the ground. They are vulnerable to soil disturbance and tilling. Most ground-nesting bees don't fly very far from their nest sites.

#### Help Their Habitat

- Expose some ground in a well-drained, sunny part of your garden.
- Minimize soil tilling or disturbance in areas designated as ground-nesting bee habitat.

- Build a sand pile in your garden or planter box, and keep it weeded.
- Bumble bee nest boxes can be dug into the soil in areas somewhat protected from the elements.

- Bumble bee nesting habitat can also be provided by simply leaving vacant rodent burrows alone.



MINING BEES



SWEAT BEES



LONG-HORNED BEES

### STEM- & TUNNEL-NESTING BEES

About 30% of bee species, including mason bees, leafcutter bees, and small carpenter bees, make their nests in holes of dead trees or in hollow plant stems. Some species will readily use artificial nest blocks made by people.

#### Help Their Habitat

- Leave dead snags and hollow stemmed plants in place.
- Cut hollow stem plants (raspberries, grasses, bamboo) into 8" lengths and tie into bundles. Paper tubes work too!
- Build a nesting block by drilling holes into a block of preservative-free lumber.
- Keep artificial nests clean to limit disease build-up and to maintain healthy bee populations.

### OTHER POLLINATORS

Butterflies, moths, hummingbirds, beetles, flies, and wasps may also pollinate flowers as they move from plant to plant.

#### Help Their Habitat

- Include butterfly larval host plants (such as ceanothus for swallowtails) in your garden.
- Include plants that open at night for moths.
- Don't be too tidy. Pollinators use piles of leaf litter, sticks, logs, and debris for pupation and overwintering.



BUTTERFLIES



BEETLES



HUMMINGBIRDS



FLIES



WASPS

### 4 Steps to Success\*

1. Recognize existing habitat.
2. Protect that habitat.
3. Provide new habitat for pollinators.
4. Manage land to maintain habitat and minimize disturbance.

\*The Xerces Society: [www.xerces.org](http://www.xerces.org)

### Habitat Essentials

- Food
- Water
- Nesting and overwintering sites
- Avoid all pesticides.

## Take Action

with Pollinator-friendly Native Plants

### Native Plants for Native Pollinators

Native plants have adapted to local soils and climates, and are the best sources of nectar and pollen for native pollinators.

- Plant a diversity of flowers for bloom throughout the growing season.
- Plant flowers in clumps.
- Choose several colours of flowers: bees particularly like blue, purple, and yellow.
- Include flowers of different shapes and sizes.



SHRUBBY PENSTEMON

MILKWEED

PEARLY EVERLASTING

CANADA GOLDENROD

CAMAS

OCEANSPRAY

WILD ROSE

GOLDEN-ASTER

DOUGLAS' ASTER

SASKATOON

CHOKO CHERRY

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writers: VALERIE HUFF, EVA JOHANSSON, LYNN WESTCOTT | designer: HEATHER MacASKILL | © photographers: STEVE CHILTON, JAMES GAITHER, MEL HARTE, VALERIE HUFF, EVA JOHANSSON, ABE LLOYD, BUD OHIO, ROSEMARY TAYLOR, LYNN WESTCOTT