

## Should Wildflowers Be Planted in Blueberry Fields?

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Bumble bees are better pollinators for blueberries than honey bees. However, bumble bees have been observed to prefer nectar and pollen from wildflowers than blueberries in regions where they are found. The British Columbia Blueberry Council (BCBC) have been encouraging growers in the Okanagan region in Canada to progressively introduce bumble bees in their farms to replace the traditional use of honey bees as pollinators. The BCBC also encourage growers to plant wildflowers in or around their blueberry farms for better pollination services; but these growers are often concerned with the proportion of wildflowers to plant relative to blueberries. We develop a mathematical model that accounts for the various stages of bumble bees foraging cycle and interactions with flowers in order to propose solutions to the growers' concerns.

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\*Mini-Symposium: Movement: animal strategies, spatial patterns, fragmented landscapes