BARN OWLS: A PEST MANAGEMENT ALLY FOR BERRY FARMERS

Key Factors to Consider	
• **Effective vole control**	• **Where to install nest boxes**
• **Nest box design**	• **Non-target poisoning & road mortality**

Effective vole control

- Barn owls are excellent rodent hunters. Their favourite food in the Fraser Valley is the field vole. A nesting barn owl pair and their chicks eat on average of 1,200 rodents a year. Barn owls live year round in the valley and can raise up to 6 owlets per year. This makes barn owls excellent candidates to be part of your farm's Integrated Pest Management (IPM) program as they will perform rodent control for you.

The diet of barn owls in the Fraser Valley consists, on average, of 85% field voles.

Nest box design

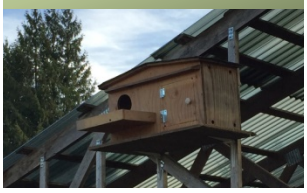
- The best nest box design for attracting barn owls to blueberry fields is a pole-mounted box. This style allows flexibility in where to install the nest box in your fields. Voles do not move very far, so the pole-mounted box can be installed close to where there is continued vole damage in the berry fields. There are several pole-mounted box designs. See www.barnowlsbc.ca for various nest box designs.

These owlets are soon ready to leave the nest to hunt their own voles.

Tips:

- ➢ Ensure there is a platform with a safety ledge level to the entrance hole for the barn owl chicks to stand on when they begin to emerge from the nest box.
- ➢ The depth from the bottom of the box to the entrance hole should be no less than 15 cm (6 in) as this will prevent young owlets from falling out of the box.
- ➢ Do not face the entrance hole into prevailing winds.

Where to install nest boxes

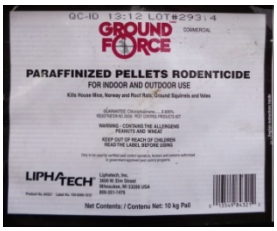


- Nest boxes are typically installed along the edge of the blueberry field. This way the box is not in the way of machinery or exposed to spray drift. The boxes are installed on poles a minimum of 3-4 meters above ground. Studies of owls in vineyards found that at least one box is required for every 10 acres. You may also install barn owl nesting boxes on or in suitable buildings nearby: the barn owls will travel to areas where there are field voles to hunt. Adding hunting perches in the fields will also help barn owls to capture voles. These perches may also be used by daytime raptors such as red-tailed hawks and northern harriers.

Non-target poisoning & road mortality

- Barn owls and other predators are at risk of secondary poisoning from voles that have eaten rodenticides. Many cases of such secondary poisoning of raptors are documented in the Fraser Valley each year. When possible, avoid the use of rodenticides. If you must use rodenticides, be aware that only certain types are permitted in fields. To control voles in berry fields, use only rodenticide products with the active ingredients **chlorophacinone, diphacinone** or **zinc phosphide.** These active ingredients are effective at controlling voles, but they are less persistent in the environment, thus reducing the risk of secondary poisoning.

  Example of product names:
  Ground Force, Ramik Green, Ramik Brown.



- Since barn owls usually fly low when hunting, they are vulnerable to getting hit by vehicles and trucks when crossing roads. Where possible avoid installing nest boxes within 500 m of major highways.

For information on how barn owls can be a part of an IPM program in berry fields: **www.barnowlsbc.ca/**
For up to date information on where rodenticides are allowed to be applied see **the Health Canada - Pest Management Regulatory Agency website - www.hc-sc.gc.ca/cps-spc/pest/index-eng.php**

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