

## **Risk factors and management strategies for bird damage in fruit**

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**General Principle 1**...when there is less fruit in a given area, there will be more damage to the fruit that is available. When/where to expect higher proportions of damage: 1) low-yield years, 2) early-ripening varieties, 3) small blocks.

**General Principle 2**...blocks near resources important to fruit-eating birds are at higher risk for damage. When/where to expect higher proportions of damage: 1) blocks under wires, 2) edges of blocks, particularly those near non-fruit areas, 3) near night roosting sites, 4) isolated blocks with little human activity, 5) potentially blocks near dairy farms.

**General Principle 3**...increasing resources for beneficial predators can contribute to pest management. Two important tools are nest boxes and perches. American kestrels are likely to use nest boxes in fruit-growing regions with enough open (field-like) habitats nearby.

### **Additional points**

Each farm is unique and should be assessed for potential risk factors.

When fruit availability is high, bird management strategies may be less necessary and effective.

Using multiple scare deterrents, deploying them early in the growing season, and moving them frequently should enhance their effectiveness in deterring birds.

Netting, if done correctly, should be effective against birds.

Bird management strategies that are biodiversity-friendly, like falconry and predator nest boxes, may be useful in marketing.

### **Take-home messages**

Assess risk

Decrease resources for fruit-eating birds

Match number and level of deterrents to risk level

Increase resources for beneficial predators

### **Webpages of interest**

Bird management planning is addressed in detail in Tracey et al. (2007), pages 211-218, [http://www.dpi.nsw.gov.au/\\_data/assets/pdf\\_file/0005/193739/managing\\_bird\\_damage-full-version.pdf](http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0005/193739/managing_bird_damage-full-version.pdf).

For information about deploying kestrel nest boxes, please see:

[http://birddamagetofruitcrops.info/PDFs/OrchardKestrelBoxFactSheet\\_20140310.pdf](http://birddamagetofruitcrops.info/PDFs/OrchardKestrelBoxFactSheet_20140310.pdf)