



Tips for vector control professionals

Pollinator-Friendly Vector Control

You can Protect People and Pollinators with Local Vector Control Agency and Pollinator Expert Partnerships.



Pesticides

Pesticides can impact survival, growth, reproduction and/or behavior of pollinators.

Use targeted applications as part of a full IPM Program:

- Make applications when pollinators are least active (e.g., late afternoon/early evening).
- Avoid direct application to blooming plants
- Consider the environmental fate of products and their acute (e.g., LD50) and chronic (e.g., NOAEL) toxicity to pollinators
- Granular and ultra low-volume (ULV) formulations are preferred
- Use host-targeted techniques (e.g., tick tubes) to minimize broadcast applications and only make applications based on action thresholds (i.e., avoid prophylactic use of pesticides)



Habitat Modification

Removing mosquito and tick habitat can be effective but can impact pollinators.

- Consult local pollinator experts; use targeted practices to avoid removing pollinator habitat
- Dump, drain, or remove sources of standing water and encourage the public to do so
- Remove leaf litter, invasive plants that harbor ticks, and clean trail edges
- Remove brush piles and rodent harbourage sites



Biological Control

- Consider local predators, fungi, and parasitoids
- Biorational larvicides minimize pollinator impacts
- Consider alternative methods (e.g., SIT, host reduction)



Surveillance

- Routine surveillance for each vector life stage is fundamental
- Establish abundance and infection rate-based action thresholds
- Use surveillance data to time applications and target focal geographies or hosts

Control Plans should rely on collaborations between local vector management professionals with local experts on pollinators.



Find local pollination experts:

- Cooperative extension agents (link)
- Local Beekeeping Organizations
- Local Universities

Questions to ask pollination experts:

- Which local pollinators may be impacted by vector control?
- Are there specific times or habitats that should be avoided?
- What types of interventions would be least harmful to beneficial insects?
- Largescale applications may be needed in response to a disease outbreak, are there contact lists for local pollinator groups?

Find vector control experts:

- Mosquito Abatement District
- Mosquito control associations (American Mosquito Control Association, etc).
- State and Local Health Departments (National Environmental Health Association, etc).

Questions to ask vector control experts:

- What vector species are of primary concern and where are they locally most abundant?
- How can vector management methods be targeted or modified to minimize any negative effects on pollinating species, while still protecting public health?
- Fewer interventions equal less risk to pollinators. What are your current Action Thresholds?



The North American Pollinator Protection Campaign is a growing collaborative body of more than 170 diverse partners including respected scientists, researchers, conservationists, government officials and dedicated volunteers. NAPPCC's mission is to encourage the health of resident and migratory pollinating animals in North America.