

IPM Prescription

Ants

It is the intent of Thurston County to manage pests through integrated pest management (IPM) techniques. IPM uses regular monitoring to decide if and when to treat. The approach emphasizes physical, mechanical, cultural, and biological tactics to keep pest problems low enough to prevent intolerable damage, annoyance, or public safety hazards. When chemical controls are necessary, they will be the least toxic available and will be used only when no other management methods would be effective or practical.

This IPM Prescription applies to ant species in general. IPM techniques for control of ants are similar; therefore, one generic IPM for ants is needed. The reason this generic ant IPM is being developed is due to a current infestation of moisture ants. Approving this generic ant IPM will allow County departments the ability to control any species of ant found to be causing a problem.

Description of Pest:

Moisture and carpenter ants is a collective name that includes a number of ant species in two major genera which are superficially similar in appearance and size. Both are wood invaders. Refer to the Cooperative Extension Bulletin 1382 for identifying the species; a 10 - 20 x hand lens will be needed.

Ants produce reproductive forms usually at one time of the year (spring or fall, depending on species and colony development). Colony activity at the time of reproductive swarming is high, with winged males, queens, and workers in a very active state. Colonies may persist for 20 years or more.¹ Colonies can be found in decayed logs, stumps, and occasionally, rotting wood in structures. Primarily, ants nest in damp soil, often near structures. They feed on sweet materials such as sugars and ripening fruit, attend aphids for honeydew, or decaying wood and become a general annoyance factor around buildings.

Impacts:

Thurston County has had a long history of ants entering office spaces in Building #2 in the spring and in the fall during warm spells. In the past few years these ants have also been swarming at the Public Health Building, Courthouse Building #3 and the Evaluation and Treatment Facility.

These are disturbing sights to employees and the public because of the high numbers of ants that are present, and the ants often fall out of overhead light fixtures. However, there is no indication that the ants are causing any structural problems.

Identification:

Before any pest management activity occurs, the species of ant will be identified so the proper control technique can be used. If necessary, samples will be provided to a pest control consultant or qualified entomologist for positive identification.

Evaluation:

Monitoring is a key element for evaluating the effectiveness of a management program. Monitoring is simply the inspection of the facility for ants and tracking the level of infestation. Facilities will be inspected at a frequency that will properly evaluate the threshold level of infestation and the

¹Extension Bulletin 1382, Cooperative Extension, Washington State University.

effectiveness of the applied management techniques. Records of the monitoring results and the management techniques that have been applied will be kept for future reference and evaluation.

Action Threshold:

Thurston County will allow a small level of infestation which means an occasional ant is seen in a single area during the day. The threshold when a treatment action is warranted is when:

1. The number of pests has reached a level deemed unacceptable by an Elected Official or Department Head, and after consultation with the Central Services Director or their designee.
2. Pests affect the operation of the department or building.
3. There is a safety issue if the pest issue is allowed to continue.
4. Allowing the pest issue to continue could cause damage to County property.
5. Allowing the infestation could effect the providing of services.

Management strategies:

When the infestation has passed the action threshold an evaluation of the following management strategies will occur and an integration of appropriate actions will take place. It is important to learn why the ants are present and remove the cause. Central Services will maintain a library that will include specific information on pests, past management actions, and locations of management.

Scope:

These procedures apply to all Central Services employees and our vendors in County owned buildings only.

Before any pest control occurs these issues should be considered.

1. Method uses an Integrated Pest Management (IPM) approach.
2. Control method is most likely to produce permanent reduction of the pest.
3. Control method is cost effective in the short and long term.

Educational techniques:

1. Notify occupants of the building that an occasional ant does not create a public health problem and their tolerance of small numbers would be appreciated.
2. Educate employees on their practices that can help reduce attractants to ants; for example, proper food storage and disposal of recycled pop cans.
3. Provide educational material to facility employees on what to look for when someone complains about ants.

Physical techniques:

1. Locate the colony if possible. Interview building residents; inspect the grounds looking for signs of the colony.
2. Physically remove colonies if located and accessible.
3. Vacuum ants as they appear indoors. Use a high powered vacuum when ant numbers are very high. A small amount of water with a teaspoon of liquid soap in the canister will prevent ants from escaping. Properly dispose of any vacuum bags.

Cultural techniques:

1. Remove biological necessities such as moisture and dead wood in the landscape and buildings. Remove dead wood both on the ground, buried, and in standing trees. Railroad ties in the landscape may be potential locations of colonies.
2. Check buildings for structural defects, weather damage, and for moisture problems. A minimum requirement would be to inspect and clean gutters to assure proper functioning. Eliminate possible over watering of landscape. Check vapor barriers, wood on concrete, and slope landscape away from buildings.
3. Seal, plug, or screen access points into the buildings from the surrounding landscape. Do not block ventilation holes that help remove moisture within the wall voids, screen when possible.
4. Keep doors and windows tightly closed.
5. Remove vegetation within three feet of the walls and roofs.
6. Remove any organic matter such as beauty bark at least three feet from the foundation of the buildings. Replace organic material with material such as crushed or larger washed rock. This will make it difficult for the ants to travel between nests in the landscape and the buildings.
7. Properly store or dispose of any leftover food items and empty pop cans. Empty trash daily during the peak emergence period.

Biological techniques:

There are really no biological techniques available for moisture ant management at this time. By preventing aphids and scale insects from increasing to large numbers in the surrounding landscape, moisture ants will have less sugary material to use as a food source.

Chemical techniques:

The County will begin chemical control by selecting insecticides that have passed the Environmental Health Division review. An example is; cyfluthrin-based product Tempo 20 WP. Begin chemical control only when:

1. An infestation has occurred and is above the action threshold.
2. No other non-chemical strategy has been effective.
3. Direct application can be made to locations where nests are suspected, such as wall voids and under building slabs. Broadcast application on the exterior of the foundation would only occur if none of the above techniques reduce the infestation to below the action threshold.
4. Permission from the Thurston County Vegetation Management Coordinator has been requested and the application is found to be in accordance with this pre-approved IPM prescription.
5. Public and employee notification procedures are completed.

Elevated Chemical Techniques:

The County will pursue alternate chemical control when non-chemical control methods combined with least toxic chemical techniques have not been effective.

Elevated Chemical Choice (the following active ingredients “fail” the County’s review):

Chlorfenapyr- for use inside buildings (only in wall voids and under slab injections).

Fipronil- for use underground outside applications only.

The efforts proceeding elevated chemical technique should include but may not be limited to the following:

1. An infestation has re-occurred or continues to occur above the action threshold after at least 2 years of least toxic chemical control.
2. The infestation is determined to be from the same pest source.
3. No other strategy has been effective.
4. Permission from the Thurston County Vegetation Management Coordinator has been requested and the application is found to be in accordance with this pre-approved IPM prescription.
5. Public and employee notification procedures are completed.

Procedure for Public and Employee Notification.

1. Post the entrances of the affected building. Posting must include name of pesticide, type of pest, anticipated or actual date of application, description of application area, phone number of department and contact person. The notification should be on a brightly colored medium. The notification should be posted as soon as an application date and time are known.
2. Send an email to as many of the building occupants as possible.
3. Notify the Elected and Department Directors in the effected building.
4. Issue an alert to the BoCC, CAO and Assistant CAO.
5. Review the State Department of Agriculture pesticide sensitive persons list. Notify those people on the list. This list can be found in the Facilities workroom file cabinet in the front of the pest control files.

Procedure for Pesticide Application

1. Obtain permission from the Facilities Services Manager or the CS Director. Also request input and/or approval from the Vegetation Manager.
2. The pesticide applicator, whether a County employee or contractor must be licensed as a Commercial or Public Operator.
3. All pesticides applications will be made in accordance to this Thurston County Board of Health approved IPM prescription.
4. Verify that the public notifications postings have been done.
5. Application will occur in the evening after the affected office is unoccupied.
6. Copies of the Material Safety Data Sheet (MSDS) for the pesticides applied will be made available during the application for any inquiries.
7. Whenever possible apply the pesticides in walls and under concrete to minimize the exposure of pesticides to the public, employees, and the circulation of pesticides by the air handling equipment.
8. Adhere to Federal, State, and local regulations.
9. Follow all label directions on insecticide.

Post Application Public and Employee Notification

Post the entrances of the affected building for five (5) working days. Posting must include name of pesticide, what pest was treated, when treated, where treated and name and number of contact person. The posting should be on a brightly colored medium.