

NORTH CENTRAL INTEGRATED PEST MANAGEMENT CENTER WORKING GROUPS

Cultivating a pest management network

SPOTLIGHT ON



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Industrial and Commercial Scientific Coalition on Pest Exclusion (IC SCOPE) Working Group

Research, Extension and industry personnel have formed the Industrial and Commercial Scientific Coalition on Pest Exclusion (IC SCOPE), to apply scientific methodology in order to quantify the impact of pest exclusion measures to improve Integrated Pest Management (IPM) practices in industrial and commercial food handling facilities. The stakeholders who are active in this working group include pest management professionals, in-house pest control professionals, facility managers, and collaborators in vector and public health management. They have formed key partnerships with leading food service and retail grocery chains. The group has met several times in person, and have continued their collaboration with conference calls and webinars.

Historically, exclusion practices for pest control have been documented only as either anecdotal findings or pre-construction guidelines. The IC-SCOPE working group notes that pests utilize structural faults in buildings to gain entry, establish infestations in suitable habitats, and avoid control measures. These infestations result in economic loss and plant disruption when facilities are shut down for fumigation and application of other controls. Further, reports of pest activity can cause lasting damage to a retail brand, even if only an isolated incident.



A door sweep is of no help when damage to the frame allows pest entry from outdoors.

The IC SCOPE working group has focused mainly on food handling facilities that manufacture, process, store or serve food to improve food safety and reduce operational costs by using IPM and mainly pest exclusion. Pest control and related contaminated food disposal represent costs to the facility. The





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groups noted that when infestations exist, there may be legal action resulting in direct costs and later indirect costs from negative publicity.

Five key themes have been identified from the IC-SCOPE working group as impeding the use of pest exclusion practices:

- prevailing business models for most pest control operations
- 2 "SOX" Compliance (Sarbanes-Oxley Act of 2002)
- extent of exclusion practices to be used around a given facility
- 4 materials selection for reliable use in exclusion practices
- O contending with building degradation and further maintenance

It should be noted that, discussion of these themes is part of uncovering larger systemic issues that should be explored, and not a criticism of specific companies. It is the hope of the



Food handling facilities can use the checklist to be proactive in pest exclusion and adopting IPM protocols.



A lack of knowledge and reliable materials for pest exclusion can result in ineffective barriers around pipe penetrations.

working group that ongoing discussions of these issues will lead to appropriate generation of questions and hypotheses for research into improving the use of exclusion as a prerequisite program for urban IPM.

The IC SCOPE working group is preparing a literature review to explore a novel concept in pest exclusion: anti-conservation biology. The concept of anti-conservation biology essentially reverses the practices used historically to preserve threatened populations, in order to put constant pressure on pests in an IPM program that includes exclusion practices.

Another focus of the IC SCOPE working group has been the development of a building checklist to assist personnel in identifying areas outside and inside commercial facilities that could benefit from pest exclusion. The checklists have been deployed at research sites, and have been used to gather data from several food handling and retail grocery locations. Analyses of the data, together with literature review are being synthesized to provide scientific support for promoting pest exclusion as a fundamental and practical approach in facility IPM.

Industrial and Commercial Scientific Coalition on Pest Exclusion www.ncipmc.org/partners/wgroup/ic_scope.php

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