

The Industrial, Institutional, Structural and Rodent textbook, says that rats only range 100ft from their nests. Is there a better textbook you recommend?



Many textbooks suggest rats only range approximately 100 feet from their nests, this data is often outdated or incomplete. In practice, I have personally observed roof rats traveling 400–600 feet to acquire food resources, depending heavily on their specific environment.

In settings where food supplies and harborage are abundant—such as near dumpsters—their range may decrease to just a few feet. This variability underscores why sanitation and exclusion are so critical; to be effective, you must apply pressure from all angles. However, as discussed during the session, it is vital not to perform exclusion (sealing) immediately, particularly with rats. If sealed off prematurely, rats may 'chew-out' or shift their travel pathways into more sensitive or damaging areas of a facility or municipality.

For those looking for updated, practical resources, I recommend the following:

Rodent Control: A Practical Guide for Pest Management Professionals by PCT. (being updated)

The newly released Mallis Handbook of Pest Control.

The Internet Center for Wildlife Damage Management, which remains an excellent resource for biology and data."

How do you get buy in from a facility that you're inspecting that has their own pest control tech. You go and see rodent droppings and take photos, Xcluders with gaps under them and their tech continues to tell them they never see rodents or droppings and that a rodent could not fit under those gaps under the doors. Exhausting to inspect a place every few weeks because they can't/won't get rid of their rodents.

That can be challenging...I think rodents are oftentimes easier to manage than human behavior and egos.

My perspective is rodents are significant (potential) reservoirs of ectoparasites, pathogens, cross-contamination “vehicles” and can cause massive brand damage if observed by clients. For example, a house mouse may urinate 3,000 micro droplets of urine and leave behind 40-75 fecal pellets each day. Factually, we know they are the no. 1 amplifier of Salmonella in egg layer facilities. Many people are allergic to proteins in their urine as well. They are a true food safety risk for humans.

Regarding sub-foundation populations, if you can execute successful exclusion from facility techniques, are you suggesting you don't need to address the population remaining under the foundation?

It depends. If you exclude them using the correct pest proofing materials, and they have no alternative routes into the facility then they can be successfully eliminated. However, that usually never happens in the real world. Inaccessible cracks in wall voids, hidden utility chases, and so on usually provide a conduit from sub-slab areas into the facility interior. “Sub-slabbers” as we call them can be a big-time challenge.



Another, and oftentimes even trickier situation, are mice that have gained access into roof subdecks of buildings....almost impossible to get to and really difficult to trap.

Are there limitations on using UV light to look for signs of urine? Is light intensity important?

Yes, uV lights are a supplemental tool to tell you if the urine is fresh (bright blue-white) or older (dull yellow-white). And, many other items fluoresce so you must know the difference between mouse urine patterns and items such as starches, glues, minerals, etc.

I do not suggest UV lighting vast amounts of space...primarily when troubleshooting and verifying rodent entry points, travel pathways and so on.

What is the name of the camera and where can you get one?

Not sure which camera you are describing but I have a Nocpix Slim H35 thermal camera I use for rodent surveys.

Any advice for keeping rodents out from under the hood of your car and eating through wires?

This is a very common question and can be difficult to answer. You can physically block them but it is not practical. If you park in a public area, it's real tough. But, if you have a garage, car port etc. Trapping can help.

Many theories on why they do this...wires look like stems, soy-based wires, etc.

Any recommendations for preventing entry via floor drains or floor sinks?

Many clients use floor drain plugs or one-way valve drains such as green drain (<https://greendrains.com/>)

Is the camera monitoring system expensive to deploy and monitor? Is it cost prohibitive for smaller pest control companies vs the name branded companies?

Game cameras are inexpensive. I was a small company and used them extensively and charge the client for the service aspect of it. Pest control companies are always too conscience on price vs. food safety IMO. Game cams are what I consider essential equipment especially when actively managing rodents, roof rats for sure!!!!

What are the most common points of entry that you've encountered on roofs of commercial restaurant buildings? Any that you think might come as a surprise to us restaurant inspectors?

I've seen them enter via the sewer stacks, inside poorly flashed utility lines (e.g., a/c, power lines),

Could game cams be helpful for cockroach monitoring?

With American cockroaches in specific situations, perhaps. But I have no experience utilizing them in this fashion. I know insect light traps, pheromone traps and even pest monitors are being designed to handle remote sensing technology....so I am sure it is possible.



When selecting a PCO, what should a food operator ask to determine who to select and what should they expect from their PCO?

I have an entire hour presentation just on this topic. Too broad to adequately answer but the key points are as follows: 1) they must have experience in the food segment 2) must conduct a “true risk assessment before designing the IPM program, 3) develop scope of work relevant to the facility with well-defined roles and responsibilities, 4) understand regulatory and third-party requirements, 5) well-versed in data collection and analysis, 6) understand CAPA/root cause analysis and 7) be committed and collaborative

What program would recommend to do rodent inspection certification?

The only one's I know about are the rodent academy's hosted by NYC, Texas A&M and the University of Florida. I would look into those as they are superior to any others I know of.

How effective is ultraviolet light for rodent detection?

See previous answer. It is most useful to determine fresh vs. old, entry points, etc.

Any electric device that can silently kill them using a small amount of electric discharge? Also, another issue with exterminating them with spring traps is the fetid odor of their decomposition.

None that I can think of. Yes, snap traps must be serviced frequently...when problem-solving it almost has to be daily until trap captures significantly slow down.

Is construction in an area responsible to Vermin infestation in a nearby area

It depends but it is often overstated. However, if the building that is being razed is infested it's definitely a potential issue. The type of environment (e.g., city, suburban and rural) also plays a big role in this....many city buildings are essentially interconnected via utility lines so the risk is greater. However, more often than not, it is not as important as some would make it out to be.

What was the rodent academy name?

New York City, University of Florida and Texas A&M

Is it possible to rodent control a grocery loading dock that is technically outside the store but is located in the underground part of the facility with sewer grates present?

Without seeing it, difficult to tell, but my initial thought is yes. It goes back to the foundational elements of rodent control – exclusion, sanitation, monitoring....I was involved with a very large, upscale grocery store with an underground parking garage, sewer system and utility chases in a large Urban environment successfully eliminate and maintain their rodent population.

