

## CASE STUDY

### A THREAT FROM ABOVE

#### A SNAPSHOT INTO THE WORLD OF ROOF RAT MANAGEMENT

## ROOF RATS ARE NOT YOUR ORDINARY RODENT AND REQUIRE A DIFFERENT APPROACH

Pest management is a 360 degree proposition. If you only look down or at eye level for signs of pest activity or damage, you are missing a whole lot, especially when it comes to roof rats.

The Sprague QA and technical teams recently tackled a roof rat mystery in a food processing plant's warehouse area that was not only vexing for the client, but caused serious headaches for their customers. Here is the story:

The client had received a complaint from a grocery store chain that found damaged product and rodent droppings in the center of shrink wrapped pallets of applesauce and fruit cups.

What made the situation more perplexing was that neither forklift driver who loaded and unloaded the pallets on and off the truck saw evidence that rodents had gnawed its way through the shrink wrap. The damage was only discovered when the pallets were opened at the grocery store's distribution center.

After the food processor forwarded a photo from their client of the damage and rodent droppings, Sprague's QA and technical staff immediately went to the plant to conduct a thorough inspection of the 500,000 sq. ft. facility which had not registered a single rat capture in the three decades it was operating.

They installed thousands of snap traps zip-tying them to storage rack legs (the pallets were stacked to the ceiling on these storage racks), posts and other likely rodent travel areas. Sprague also used flour around the rack legs in an attempt to locate where the rodent was coming from.

Much to their frustration, these efforts yielded no evidence of rodent activity. When a second customer (there were three total incidents) called to say they too received a pallet with damaged product and rodent droppings inside, the heat was turned up to identify the source of the threat and eliminate it – quickly.

How were these "ghost" rodents accessing the shrink wrapped pallets without detection? It was determined by examining the droppings that the culprit was a roof rat and a different approach was needed. Sprague staff purchased game cameras from a local sporting goods store and installed them on top of the pallet racks to see what was going on high above the warehouse floor.

On the first night the cameras were recording they got a hit and had visual evidence of a roof rat. The rat had been accessing the plant through an opening – less than an inch wide – around a support post near a storm drain on the roof. Once inside the building the rat entered the top of the unwrapped pallets and, aided by the rounded corners of the packaging design, was able to slip down into the center of the pallets, eat to its heart content, and depart without leaving any outward evidence it was there.

Snap traps were placed on top of the pallet rack near where the camera had captured the image. On the next night the rat was captured and the threat eliminated. Sprague also patched the hole in the roof to prevent any further rodent visitors from accessing the facility.

## **LESSON LEARNED**

Never assume the rodent threat is at ground level – rodent threats can come from all angles. Also, think outside of the box and consider deploying technology – like cameras – to identify the root cause of the threat.

## **WHERE DO ROOF RATS LIVE?**

Where do you find roof rats? Since roof rats can spend their entire life above ground you must look up to find evidence of their presence inside a structure. The following areas are likely to “welcome” roof rat activity:

- Exposed beams and pipes
- Hidden pipe chases and utility lines
- Wall voids and drop ceilings
- Concrete cinder blocks
- On top of shelving units
- Overhead electrical junction boxes
- On top of or inside equipment (they have been found inside large ovens in commercial bakeries)
- Raised and false floors