OPPORTUNITY:

Removing the guesswork to protect a vulnerable apartment building

BACKGROUND

The apartment building faces heavy Norway rat pressure coming from a garden area directly across an alley. Rat food is plentiful in the area, as chickens are caged in the garden across the alley, and a nearby restaurant puts out trash nightly. Further, trash from an apartment building is piled on the curb once a week. Additional rat harborage is in a park adjacent to the apartment building.

Black Widow Termite and Pest Control has kept the apartment building rodent-free for more than a decade. That became more challenging after the garden area changed ownership and Black Widow was denied access to treat that space. The space went on to become so rat-infested that burrows are readily visible along the alleyway, and many local residents were avoiding the alley at night because of rats.

ACTIVESENSE™ SYSTEM DEPLOYED

Rodenticides are not allowed near the garden area, so Black Widow maintains protection around the apartment building using rodent stations containing snap traps. In November 2017, Black Widow installed the ActiveSense™ system in 11 exterior rodent stations as an added measure to counter rat pressure in the area.

Sensors were placed in rodent stations in the alley facing the garden area and five were in rodent stations on the street facing an office building.

SITE:
Six-floor, multifamily apartment building

LOCATION:
Manhattan, New York City

TARGET PEST:
Norway rats (Rattus norvegicus)

COMPANY:
Black Widow Termite and Pest Control

RESULTS:

57 ACTIVITIES DETECTED

49 RODENT CAPTURES

ZERO FALSE POSITIVES AND **ZERO** FALSE NEGATIVES

"ActiveSense lets us give our clients the best service possible."

Service manager
Black Widow Termite and Pest Control
Bedford Corners, New York

DOW® **Dow AgroSciences**
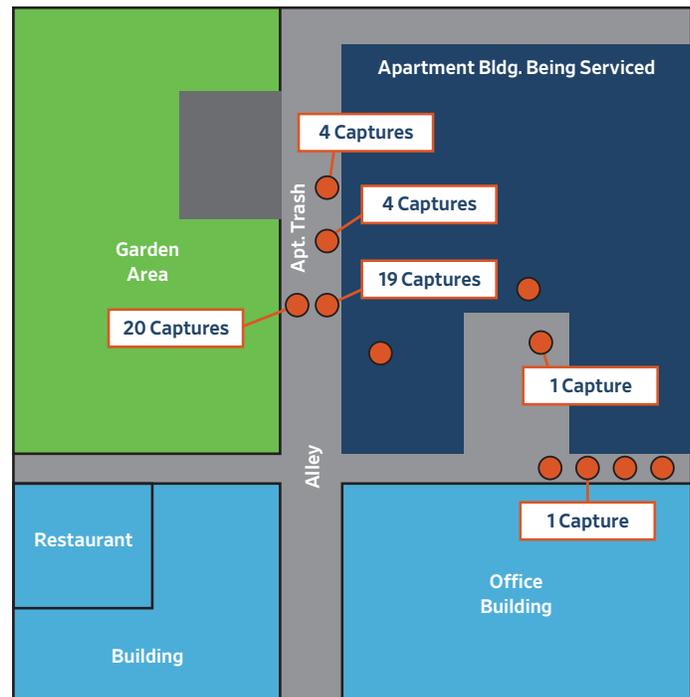
MONITORING AND RESULTS

The addition of ActiveSense removed the guesswork from Black Widow's control program. Knowing exactly when and where activity had taken place allowed traps to be cleaned out within two days after being triggered. More timely service increased live trap availability, which in turn increased captures. One indication of the increase in captures was a shift from finding mostly adult rats in traps to more juvenile rats.

An important discovery from the ActiveSense™ system data involved human behavior. Over the course of a week, Black Widow received a notification for the same rodent station every night at about 8 p.m., but with no rat capture in that station. Knowing the time of the alerts and the station led to the solution. It was discovered that employees took out the trash every night. They would use that rodent station to prop the door open, leaving the building vulnerable to rodent entry. Black Widow shared this information with the building supervisor, who corrected it.

Black Widow will continue to monitor with the ActiveSense system to help ensure the rodent activity does not move inside the structure.

ACTIVESENSE™ SYSTEM MONITORING DATA (ZERO TO 90 DAYS AFTER DEPLOYMENT)

- **57 activities detected**
  - Two rats caused multiple detections due to movements when caught by paw
- **49 rodent captures**
  - 38 rats in stations between the garden area and the apartment building
- **Reliability**
  - Zero false negatives
  - Zero false positives (after disturbances caused by employees was corrected)
  - Rodent detection accuracy greater than 95 percent

Apartment Bldg. Being Serviced

4 Captures

4 Captures

Apt. Trash

19 Captures

Garden Area

20 Captures

1 Capture

Alley

1 Capture

Restaurant

Office Building

Building

FOR MORE INFORMATION ON ACTIVESENSE, VISIT **WWW.ACTIVESENSE.COM**

Dow AgroSciences