### **D-BASF**

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## Rat infestation prompts timber yard retailer to take action

Significant reduction in rat activity during treatment phase with BASF Experimental Rodent Bait 410 06 I

#### Problem

Rats are among the most destructive pests urban and rural businesses can encounter. They eat just about anything that is edible and can even gnaw through bricks. This made their presence at Ken Probert Timber Yard especially alarming. "I began to notice more of them [rats] during store hours. It was beginning to be a bit troubling, especially if a customer noticed," explained Matt Probert, owner of the timber retail store.

The commercial timber yard, located in an industrial setting in the town of Oswestry, England, was experiencing a medium-level infestation of the Norway rat, Rattus norvegicus. A census found evidence of approximately 59 to 63 rats and signs of structural damage to the site's wood, tin, steel and concrete-block buildings, as well as rat droppings and burrows.

Matt Provert, Owner of Ken Probert Timber Yard









#### above:

Stacked timber creates an ideal location for rodents to nest under or nearby. The back lot where rodents were spotted.

#### **Case Study Summary**

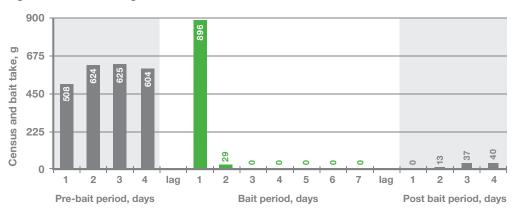
- Commercial timber yard experiencing rat infestation
- Significant reduction in rat activity during treatment phase with BASF Experimental Rodent Bait 410 06 I
- Population control within 7 days
- Post-treatment census indicated 96% rodent control
- No evidence of a non-target being affected

#### Solution

#### Quick control and efficient baiting are key drivers for success

Rats' proficiency at causing destruction, spreading disease and reproducing rapidly means getting an infestation under control quickly and effectively is of the utmost importance. Conventional anticoagulant rodent baits, however, can take up to a month to achieve results. Searching for a more efficient method, Ken Probert Timber participated in a field trial of the new BASF Experimental Rodent Bait 410 06 I. It can achieve population control in as little as seven days and is highly palatable to rats and mice even when other attractive food sources are available. The bait tested also has a "stop-feeding" technology causing rodents to lose their appetite faster once a lethal dose is consumed. This allows the bait to be more efficient as the dominant rodent stops feeding and the sub-dominant rats can begin feeding sooner. The stop-feeding technology is typically not found with other competitive products. The bait also poses a lower risk to non-target animals since it has a lower toxicity profile compared to anticoagulant rodenticides.

#### Field Trial on 140 01 06 I at Ken Probert Timber Yard Against Rattus norvegicus



#### Result

#### Experimental rodent bait achieves 96% control

The trial employed a conventional surplus baiting technique occurring over seven days. Bait trays, each containing approximately 140 grams of BASF Experimental Rodent Bait 410 06 I, were strategically placed at 36 points on the timber yard's 0.5-hectare (1.2 acre) site. The bait was replenished on the second day and not again thereafter, a reflection of

the stop-feeding technology of the experimental rodent bait. Rat activity, monitored using tracking patches, decreased from approximately 59 to 63 rats to zero for the final four days. A post-treatment census indicated 96% control, which is considered excellent for any rodenticide. Achieving population control within seven days is up to three times faster than anticoagulant rodenticides. "I'm very impressed with the speed of control. Excellent," commented owner Matt Probert.

Wooden bait trays and tracking patches lightly coated with horticultural silver sand were placed in position following the pre-trial survey. This allowed the rodents to acclimatize to the trays. At the same time, provisional positions for the bait placements were evaluated.

Four days after trays were placed, 200 g of whole wheat was placed on each tray and the tracking patches were freshly coated. For the next three days the residual wheat in each tray was inspected daily, weighed to the nearest 1.0 g on a portable electronic balance, and any take was replenished. At the end of each day the total amount of census diet eaten was calculated. For an approximation of the infestation size, for every 10 g of census diet eaten per 24 hour period was equated to the presence of one rat. This 10 g number accounts for the fact that the rodents will also utilize other sources of food. Marks on the tracking patches were quantified and recorded and the patches were erased and smoothed or re-coated.

#### **Going Forward**

#### New solution for worldwide rodent problem

Ken Probert Timber's infestation is far from unique. Rodents cause significant damage to businesses and homes worldwide. An estimated 30% of farm fires are caused by rodents gnawing on electric cables. Rodents destroy approximately 20% of the world's agricultural feed annually and spread more than 200 human pathogens. Trials with other urban and rural customers continue to show the potential of BASF Experimental Rodent Bait 410 06 I to control rodent populations in less than 10 days with a lower risk of primary and secondary non-target poisoning.

"I'm very
impressed
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Excellent."

Owner of Ken Probert Timber Yard, Matt Probert





# above: 36 bait points were established on the 0.5 hectare site. The side of the retail store where customers shop for timber is flanked by wooded areas ripe for rodent activity.

#### Schedule a Field Trial with Us

Think you have a site infested with mice and/or rats? Let BASF assess your situation and see if you qualify as a free trial site. Trial dates are limited, so contact us today in the United States at 1-800-777-8570 or email us at rodentcontrol@.basf.com.

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With sales of more than €5.8 billion in 2015, the BASF Crop Protection division provides innovative solutions for agriculture, turf and ornamental plants, pest control and public health. Our broad portfolio of active ingredients, seed treatments, biological controls, formulations and services optimizes efficient production of high quality food and protects against post-harvest loss, damage to buildings and the transmission of disease. By delivering new technologies and know-how, BASF Crop Protection supports the effort of growers and pest management professionals to make a better life for themselves and society. Further information can be found on the web at www.agro.basf.com or on our social media channels.

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