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Do you do enough to prevent rodent damage to stored machinery

After a busy harvest season, most farmers are ready to park up machinery in the farm buildings for the winter. However, Ken Black, rural hygiene manager, from Bayer, warns of the serious threat of rodent damage to machines unless preventative measures are employed at this critical time.

“Rodent damage to machinery is a serious issue for many farmers,” says Ken Black, rural hygiene manager at Bayer. “They’re often so pleased to see the end of harvest, that machinery is shut away without being cleaned properly, and left over grain can be an attractive food source, for rodents,” he says.

“This is why Bayer is conducting a rodent damage to farm machinery survey to go out to farmers over the winter to find out the extent of the damage made when machinery is in storage.

“Combines in particular spend a significant amount of time in storage and offer excellent shelter and food sources for rodents, if not cleaned effectively post-harvest.

“As part of their natural behaviour, rats and mice gnaw on anything that’s accessible, including cables, hydraulic hoses, control panels and even cab fittings,” explains Ken. “However it’s vital that farmers understand the fundamental differences between rat and mouse behaviour to control them effectively,” he explains.

“Rats are far more predictable, because they’re choosy over what they eat. They generally live outdoors in summer and move indoors when temperatures drop in the autumn and are much more suspicious of changes to their environment.

“Mice are less predictable, generally appearing in larger numbers. They’re more inquisitive and therefore more prone to gnawing on machinery. They live indoors all year and, in my experience, are more destructive,” he adds.

“When controlling either rats or mice vigilance is key,” he warns. “Obviously, we would all prefer not to have any rodent issues, but in reality farm buildings offer an easy home. Rats can get into a hole around the size of your thumb; mice the size of a pencil. So, if possible, repair holes in the building that give them an easy way in. Once



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that is done, check buildings on a weekly basis for activity. Droppings are the easiest way of identifying a presence. Mice urine also gives off a distinctive smell.

“For effective rat control, my advice would be to site bait boxes around key areas as soon as machinery is parked. Bait is not necessary at this time, but having the points in place results in the rats being familiar with them before bait is added. This significantly increases the likelihood of bait take once it is placed,” Ken says.

“Only apply bait when activity has been confirmed. This is important for two reasons; it reduces the risk of poisoning non-target animals and increases the palatability of the bait when needed. Once activity has been confirmed, use a bait such as a Rodilon® block immediately. Be aware, rats in particular will leave ‘food’ unless it’s fresh, so monitor uptake and change the bait every few days where necessary. Rats also hoard food, so make sure blocks are tied down with wire. Otherwise, it may be taken away and not consumed.

“Another option for indoor use is to apply a foam product such as Racumin® Foam to known rat runs,” he says. “A foam doesn’t rely on the animals directly consuming the product, it appeals to their grooming habits, when they clean themselves, and they ingest the bait. However, because Racumin® Foam doesn’t allow consumption to be monitored in a way that a block does, this makes it more difficult to assess the control levels, so it’s important to integrate pest management practices. The same precautions need to be applied to Racumin® Foam as you would with traditional baits, so the risk to non-target animals is reduced.

“Mice, because of their sporadic behavior, require lots of baiting points. In a typical combine shed I would suggest around 20 baiting points for fast and effective control. There are no rules on where to place these, but consider putting bait along, or on top of walls, on beams, girders, and around the machinery as well as at ground level

James Morley, John Deere purchasing manager, added his thoughts on rodent damage to machinery. “Every year, we see machines with significant damage due to rat or mice activity, and this can mostly be avoided if managed more effectively on farm,” he explains.

The machine that we see the most damage to is the combine harvester. A case in point is a farmer who reported tens of thousands of pounds worth of damage because he had to fix the gnawed wiring, and replace all of the cushions and coverings in the cab,” he says.



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When considering practical rodent management on farms, Ken advises on the areas to pay particular attention to. “The first areas to concentrate on when placing bait, are the points of the machines that touch the ground, particularly the wheels.

“The time most problems are found is in the spring when farmers are starting to get machinery ready for the next season. Obviously, this can also result in delays to fieldwork, which can be incredibly frustrating for farmers, especially if it means missing a weather window.

“On a combine the dead space behind the rear axle offers rodents a harbourage and potential nesting point. I would also suggest baiting the left and right hand sides of the feeder housing and the space behind the cab, due to the amount of cables in this area.

“Other advisable areas include the sieve to the rear of the combine and monitor boxes on the sieve. Where the returns elevator inspection panel is open, bait should be secured in place to prevent rodents gnawing on the rubber ‘paddles.’ It’s also important to pay attention to the cleaning fan access points; the hydraulic controls and wiring on the combine. The hydraulic valve and the roof engine bay, should not be overlooked, due to the amount of connecting pipes and cables.

“And finally, the header drive line may require baiting to protect the cables and belts. This may depend on how the header is stored for the winter period,” says Ken.

Bayer are currently working to better understand the scale of the issue via a national survey being distributed to farmers around the UK. “We want to know what damage has occurred, how much it has cost, and the further impact it’s had.” concludes Ken. “For example, we’ll find out whether farmers have lost valuable days of harvesting as a result of damage to machinery. This is one of the hidden costs that, as an industry, we need to quantify and understand, in order to work at preventing the issue.”

