Hi-tech rodent catcher

The Rivierenland water board reports that it managed to catch a coypu (a rodent) for the first time using a smart trap-cage. WUR pest expert Bastiaan Meerburg sees potential.

The use of technology to control pests is not new in itself. In greenhouse horticulture, highly agile mini-drones hunt down and destroy harmful insects. But technological solutions for tackling rodents *are* a novel development, says Meerburg.

'You want to avoid bycatch for both economic and ethical reasons'

The smart trap-cage, which was developed with the help of Applied Biology students at the HAS university of applied sciences, uses image recognition and artificial intelligence. A motion sensor, camera and modem linking to a database are used to determine whether the animal in the cage is a coypu. If so, the cage door closes and a signal is sent to the rodent catcher on duty. Any other creature that happens to enter the cage, such as a duck or otter, is allowed to leave.

Big beasts

Meerburg understands why such smart technology is being used for coypus. 'Like muskrats, they are a non-native species that can cause huge damage to flood defences. And they are big beasts; they weigh six to ten kilos,' he explains. In the Netherlands, coypus are found almost exclusively along the border with Germany. They are caught wherever possible to prevent them from spreading further. 'The more specific the trap, the better. You want to avoid bycatch if possible for both economic and ethical reasons,' says Meerburg. That is why he thinks the smart trap-cages are a prom-

The coypu (*Myocastor coypus*) originates from South America and is recognizable by its white whiskers and large orange incisors.
Photo Shutterstock

ising solution for combatting and monitoring coypus and muskrats. But he has doubts whether they will work on brown and black rats. 'They are highly intelligent creatures and capable of learning from one another. We will have to see whether they are a bit too smart for the smart trap-cage.' ME