

# Crows and magpies using anti-bird spikes to build nests, researchers find

## Dutch study identifies several examples of corvids' 'amazing' ability to adapt to the urban environment

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Tue 11 Jul 2023 15.41 BST



- One of the nests made from anti-bird spikes. Photograph: Auke-Florian Hiemstra

Birds have never shied away from turning human rubbish into nesting materials, but even experts in the field have raised an eyebrow at the latest handiwork to emerge from urban crows and magpies.

Nests recovered from trees in Rotterdam in the **Netherlands** and Antwerp in Belgium were found to be constructed almost entirely from strips of long metal spikes that are often attached to buildings to deter birds from setting up home on the structures.

The discovery prompted researchers at the Natural History Museum in Rotterdam and the Naturalis Biodiversity Center in Leiden to scour the internet for further examples, leading to the identification of two more anti-bird spike nests: one in Enschede in the Netherlands and another in Glasgow.

“I really thought I’d seen it all,” said Kees Moeliker, the director of the Natural History Museum Rotterdam, who studied the crow’s nest found during tree maintenance near the city’s main railway station. “I didn’t expect this. These anti-bird spikes are meant to deter birds, they are supposed to scare them off, but on the contrary, the birds just utilise them.”



A magpie with some more traditional nest material in its beak. Photograph: blickwinkel/Alamy

While the Rotterdam nest was made by crows, the other three were built by magpies, which construct large dome-like nests. The crows used the anti-bird spikes as a sturdy construction material, but the magpies may have appreciated their intended use: they placed most of the spikes on the nest’s roof where they could deter predators, including other birds and weasels.

Auke-Florian Hiemstra, a biologist at the Naturalis Biodiversity Center, said: “Even for me as a nest researcher, these are the craziest bird nests I’ve ever seen.”



Bird's nest made from anti-bird spikes and a strip of the spikes (bottom right). Photograph: Auke-Florian Hiemstra / Natuurhistorisch Museum Rotterdam

It is not the first time birds have been found to incorporate urban materials into their nests. In 1933, a South African museum reported a crow's nest fashioned from **hard-drawn copper, galvanised iron and barbed wire**. Nails, screws and even drug users' syringes have all found their way into birds' nests.

About 25 years ago, Moeliker collected a pigeon's nest from an oil refinery in Rotterdam harbour, a place he described as having "nothing green, only industry, concrete and bad air".

The nest was made not from twigs but chicken wire. As an example of birds' ability to adapt to the urban environment, he considered it the ultimate. "It turns out that it wasn't," he said, in view of the latest crow and magpie nests. They are described in *Deinsea*, the annual of the Natural History Museum Rotterdam.

Rather than finding old strips of anti-bird spikes at rubbish dumps, Moeliker, who previously won an Ig Nobel prize for documenting **the first known case of homosexual necrophilia among ducks**, says crows and magpies appear to be finding and removing the metal strips from buildings. "They are ripping the stuff off. It's been observed in several kinds of birds," he said.

On Monday, a European team of researchers warned that **nearly 200 bird species build nests with potentially dangerous human litter** ranging from **cigarette butts to plastic bags and fishing nets**. Dr Jim Reynolds, an ornithologist at the University of Birmingham, who took part in that work said he was "amazed" at the anti-bird spike nests, but added that if any group of birds was going to do it, it would be the corvids, who are known for their cognitive skills.

"I was really struck by the irony, to take anti-bird devices and use them to their own ends," Reynolds said. "They are even more amazing than I think they are." As well as helping to protect the nests, the spikes may also serve as a display to impress potential mates, he said.



A crow. Members of the corvid family are known for the cognitive skills. Photograph: Arterra/Universal Images Group/Getty Images

Anti-bird spikes are not only attached to building ledges to deter birds from nesting. In 2017, residents in the leafy Clifton neighbourhood of Bristol **fixed bird-repelling spikes to trees** to stop pigeons perching on the branches and creating a mess on parked cars below.

“We should not deter birds, we should embrace birds and live together with them,” said Moeliker. “These birds are very smart and they always find ways to cope with the harsh urban life. I’m very sympathetic towards these crows and magpies. They are my heroes.”

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