

A Dutch laser bird deterrent helps minimise bird flu outbreaks

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Photo: filmfoto 123rf

A Dutch laser bird deterrent has proven highly effective in reducing wild bird presence at Australian poultry farms, thus lowering the risk of bird flu spread.

Australia is currently facing outbreaks of highly pathogenic avian influenza (HPAI) across several regions, including Victoria, NSW, and the ACT. The Department of Agriculture,

Fisheries and Forestry is actively coordinating efforts to manage these outbreaks and prevent further spread.

All infected premises have been depopulated, and strict movement restrictions are in place to limit the movement of poultry, birds, and related products.

The government emphasises the importance of adhering to stringent biosecurity practices and poultry owners are advised to maintain clean facilities, prevent contact with wild birds, and ensure proper handling and cooking of poultry products. These measures are essential to manage and mitigate the impact of the outbreaks.

In addition to these traditional biosecurity measures, an innovative tool from the Netherlands studied by Wageningen University is being recommended to enhance biosafety on poultry farms.

[The AVIX Autonomic laser bird deterrents](#), developed by the Dutch company Bird Control Group companies, emit laser beams that create a hostile environment for wild birds, effectively deterring them from entering poultry areas and reducing the risk of avian influenza transmission. These deterrents are non-lethal, humane, and require minimal maintenance, making them a valuable addition to existing biosecurity protocols.

A recent [research study](#) conducted at Wageningen University investigated whether the Bird Control Group laser system could be a successful biosecurity measure to prevent avian influenza viruses from spreading from wild birds to domestic animals. The results were promising, indicating an overall **98.2 per cent efficacy in reducing the rate of wild birds visiting the farm.**



The AVIX Autonomic laser system continuously moves a laser beam that leverages a bird's innate fight or flight response to scare away both pests and migratory birds. As a result, the area looks uninhabitable, pushing the birds elsewhere and reducing contamination and the risk of avian flu transmission across poultry farms. The Dutch laser bird deterrent helps minimise bird flu outbreaks.

Laser Beams Keep Bird Flu Out of Poultry Farms

Wild birds that are potential carriers were successfully deterred from approaching a poultry farm during the study.

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Wageningen University & Research

Wild waterfowl are potential carriers of bird, or avian, flu, and every poultry farmer's nightmare, especially in the winter months.

So a team of researchers from [Wageningen University & Research](#) in the Netherlands decided to see if lasers could deter wild birds from these farms, especially if they're free-range, and keep bird flu at bay.

Lasers are already used at airports and landfills to keep wild birds away, so there's no reason why they wouldn't work or be used at poultry farms.

The team's laser method

Wild geese and ducks are the most “dangerous” culprits for spreading avian flu through their droppings, especially in a free-range farm where poultry can directly ingest feces by eating or drinking it from puddles.

[The team installed a 19-foot](#) (six-meter) mast in the free-range area directly linked to a barn of a poultry farm that had previously suffered bouts of bird flu in its poultry. Eight wide-angle cameras were placed on high poles around the study area to catch all activity.

When the chickens went into the barn at night, between 5 pm and 10 am, the laser beams were switched on inside, and during the day between 10 am and 5 pm, the outside free-range area was laser-beamed. The team recorded these areas for one month without the lasers, and then for one month with the lasers.

Their findings were crystal clear.

Without the lasers, wild birds visited the area between sunset and sunrise every day, swimming in puddles, walking around the free-range pastures. These same waters and pastures were visited by the chickens, as was captured by the team's cameras.

In contrast, during the month when the laser beams were on no wild ducks visited the site. There was, in fact, [a 99.7 percent prevention rate](#), as recorded by the scientists. And there were almost no other wild birds recorded either, with a 96 percent prevention rate recorded.