Natural Curiosity Meets Artificial Intelligence

Pest Plants Mapped Using AI Drones

Jacob Brookie

Keeping pests away from the Manawatū Estuary can be as cutting edge as the latest AI technology – or as simple as painting a spray bottle.

More than 50 biosecurity professionals, that included staff from regional councils, government departments and wildlife sanctuaries, converged at Wildlife Foxton Trust during the NETS2025 biosecurity conference.

Horizons Regional Council Pest-Plant Officer and field-trip organiser Abi Wightman said Foxton Beach was an iconic site from which to learn about community-led biosecurity.

Delegates were given a demonstration of an AI equipped drone which flew over the dunes identifying pest plants, creating a map to help with spraying and removal. As more training data is fed into the AI over time, eliminating skewed results from wind, shadows and reflections, the final results will be shared with other councils by Horizons.

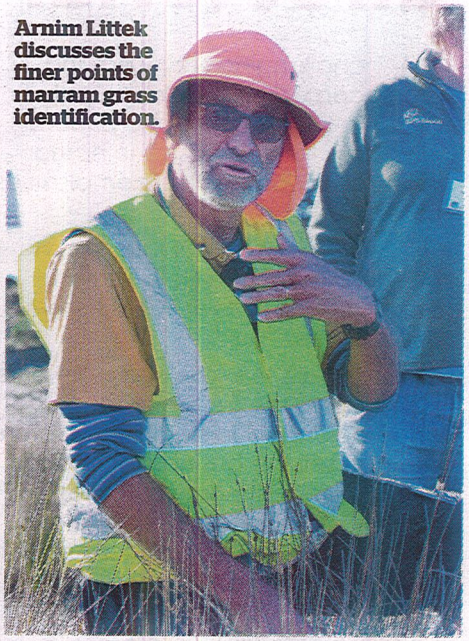
Estuary volunteer Dr. Bob Hoskins said his experiences removing pest plants at the estuary involved painting equipment such as spray bottles in bright colours or tying a ribbon to them.

"When I first arrived there were more types of invasive weeds than native species.... If you drop something in the sand here, you lose it!"

Information was also shared about the Trust's trapping programme around the estuary, and the benefits and successes of community, council and iwi partnerships in projects.

With many hands on the ground and AI in the sky, pests in Foxton Beach are now on notice.

Dr. Bob Hoskins shares his experiences removing pest plants at the estuary.



Arnim Littek discusses the finer points of marram grass identification.

The group of delegates by the Dune Gardens.

Courtney Tregurtha-Narin explains how artificial intelligence can provide natural benefits.