

Fertile idea ensures farmers can make spray while the sun shines.

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Colin Brown: "It was total balls on the line here. If this didn't work we were broke."

Photo: Shannon Beer

DEAD LAKES are big problem for farmers. Fertilisers and agricultural chemicals are blamed for leeching into water courses, causing algal blooms that destroy other life. With rising environmental concerns have come stricter guidelines on fertiliser use—farmers must not only apply it in the right quantities, in the right place, but also prove that they have done so.

Conlin Brown, an agricultural consultant based in Mosgiel

near Dunedin, has developed a characteristically New Zealand solution to the problem. It also helps farmers save money.

TracMap, developed with Dunedin GPS specialist Thomas Electronic, is a dashboard-mounted device that shows a farmer, on screen, where chemicals are being applied. It can then send that data to his computer as a permanent record.



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There are overseas-made products that do this, but they don't meet the needs of many New Zealand farmers.

Brown identified the problem after discussions with people in the field.

"Existing hardware products have all been designed around the concept of driving a tractor in straight lines across flat country" he said. "But they are very difficult to use driving around a hill country environment on grass."

There were other issues. Display screens were hard to read in sunlight, and touch screens quickly degraded in the dusty cabs of fertiliser trucks. In practice, said Brown, a driver whose hands are covered in dust or grease doesn't want to touch the screen, "so he touches it with the first

thing that comes to hand – a screwdriver”. This has unfortunate consequences for the life of the unit.

Having the idea was one thing, but converting it into a marketable product was another.

“I know what I want and I understand the market,” said Brown, “but don’t ask me to pick up a soldering iron.”

That job went to a group of technology businesses in Christchurch-EDAC Electronics, Bluewater Systems, e2-media and Holliday Corporation, led by Christchurch angel investor Phil Holliday.

Bluewater Systems, which designs and builds hardware based on ARM microprocessors, was first contacted about the product last November. Just eight months later the TracMap was in production.

Brown, who would have been happy with firm orders of 20 units before the first one rolled off the production line, was ecstatic to get 70. At \$5000 each that’s a healthy start and Brown, who downsized, remortgaged and tightened his belt to get the business off the ground, sees great potential.

“It was total balls on the line here. If this didn’t work we were broke. But it’s also bloody good to build something from scratch that New Zealand industry needs to be competitive on the world market. That’s real satisfying – to create something from scratch that makes a difference.