

Dolphin Coast shot hole borer infestation results alarming

Simbithi Eco Estate has been the leading force locally in the fight against the PSHB - a beetle that acts as the carrier of a fungus that infects and kills trees.

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Ross Walters and his drone in Simbithi Eco Estate, where he has been mapping out the areas affected by polyphagous shot hole borer.

Kitted out with a near infrared camera, a drone was used to map out forested areas to identify the dreaded polyphagous shot hole borer (PSHB) – and the results were alarming. Simbithi Eco Estate has been the leading force locally in the fight against the PSHB – a beetle that acts as the carrier of a fungus that infects and kills trees.

The Dolphin Coast was South Africa's seventh confirmed site of infestation of the beetle which is believed to have come from South East Asia.



The red dots indicate stressed trees in Simbithi Eco Estate.

Using the latest in technology, Ross Walters – an aerial survey specialist – took a close look at the problem.

"The camera picks up plants under stress as they will not photosynthesis properly and start to reflect light instead of absorb it," said Walters who lives in Simbithi.

"So far we have picked up over 560 "hot spots" in Simbithi that indicate tree stress on the map that has a strong correlation to shot hole borer infection. Some hot spots cover more than one tree, especially in the forested areas where individual trees are hard to identify.

"The total area of the hot spots equates to 5,3 ha, out of the 480 ha or just over one percent of the surface area of Simbithi."

He said the borer has been found in numerous trees, specifically the big Natal figs and old Pigeonwood trees.

Walters is working closely with Simbithi's facilities, maintenance and environmental manager Gary McKenzie who said they are the first in KZN to try the arbour jet technique – a special method of injecting a fungicide – which they hope will control PSHB.

McKenzie urged Dolphin Coast residents to look out for signs of PSHB infestation.

"If you see branches and leaves dying back, tiny holes on the stem or tunnels in the branches, these are all signs of PSHB. It is crucial to remove the affected branches immediately by professionals. The branches have to be removed carefully and the wood chipped, or preferably incinerated, to prevent the beetle from spreading.

"The treatment of infected trees is extremely complicated, and I would advise that indiscriminate use of pesticides could cause more harm to animal and insect life. Please be careful of what chemicals you use," said McKenzie.



The trees that are currently being treated with the arbour jet method seem to be greener. Landscape contractor Darren Coull has set up a wood chipper in Foxhill where he can dispose of infected wood in the proper manner.

“We are doing tests with registered broad spectrum chemicals to find a way to control PSHB.

"The major problem is that we are dealing with two different issues – a living beetle and a fungus, so you need two different chemicals to kill it," said Coull.

"We need to find practical, cost effective ways to control this beetle. It is spreading rapidly all over KZN and we need to catch it before it starts climbing into our macadamia crops which will have long term repercussions. People need to get on board to help stop the beetle."

Dolphin Coast Conservancy's Di Jones said one of the main steps to get rid of the beetle was to clear invasive plants and weeds which are its host plants.

"The castor oil plant specifically is an invasive species which this beetle loves. We have just cleared Salt Rock Drive from this plant and its seeds," said Jones.



The castor oil plant is one of the main hosts of the beetle.

KDM park and gardens department's Che Gopi said they are also assisting in the clearing of weeds and invasive species.

"We try to keep the verges clean of weeds and serve notices where vacant private properties are overgrown with weeds and invasive plants," said Gopi.

If you suspect you may have an infestation of shot hole borers but are not certain, call Coull at 082 562 4446 for assistance.