

An eye for design

With a mind for both farming and engineering, 14-year-old Travis Muscat works from photos and observation to create his own designs for moving Lego models of cane farming machinery.

Ever since he was a young boy, Travis has been mad keen on tractors. That's no real surprise, with grandparents on both sides running cane farms in the region. His grandparents are Peter and Jennifer Borg, of Hampden, and Vince and Sue Muscat of Habana. His parents are Linda and Chris Muscat.

Always keen on Lego, he has been creating his own farm machinery from a young age.

"It's always been a thing from when I was younger," said Travis. "We'd buy a set, and I'd look at the pieces and take a bit out and use it. Dad used to build stuff with me, and I would pull it apart and change it to how I wanted it. And Dad had a bucket of Lego from when he was a kid, too."

Mum Linda laughs, saying Travis was born being into tractors: "One of his first words was tractor. Really! By two or three, everything was 'tractor, tractor'."

Linda said that she and Chris appreciated Travis's hobby.

"It's nice that he has a hobby that's not video-gaming or technology - on the phone all the time," she said. "It's more on the designing side. It's what engineering is, getting things to work. It's one thing to build Lego out of a book, with instructions. He builds without instructions."

With Chris a diesel fitter and workshop manager, and Linda a book-keeper, that mind for precision runs in the family.

If you passed through the Sugar Pavilion at Mackay Show this year, you may have seen Travis's work: haulout rigs, harvesters, tractors. The models are quite complex, and mimic actual movement of the real-life machines.

"I had a whole carpet farm when I was younger that I would play with, but now it has moved into more of a collectible thing. With fine-tuning, and everything becoming quite fiddly to play with, I thought I'd just leave it up in a cabinet. So it's grown from there where I decide I like that tipper bin, and will try to build that, or



Travis Muscat with some of his builds.

whatever."

He doesn't typically enter Lego comps, but he has entered his models in the Arts and Crafts section at show and won a few prizes over the years.

"I've always been about the realistic part of it, and I was always neat. Very picky with my work, everything fine-tuned a lot."

He said his hardest build to date was the carter bin (in blue, above image), which has a lot of articulations designed in.

"That's due to the angles, and everything inside. However, everything proves a bit of a challenge when you try and make it work realistically. Obviously, because it is so small, not everything is

perfect-perfect, but it's close," Travis said.

He said all his models are a work in progress: "Nothing's ever really finished. Well, it is, but, at the same time, you notice something different, or you add something on."

A Year 9 student, Travis is looking towards an engineering sector apprenticeship in mechanical or boilermaking. He has been working with a water blasting repairer.

"It's part-time mechanical, TA work, and they are teaching me things along the way," he said.

He also used his school holidays to do some work experience with an engineering firm that works across farming and mining machinery.



Restoration of this 1961-3 Nuffield 342 is an ongoing project for Travis and his Dad Chris. Work so far has focussed around the radiator, water pump and seals.

"It was a good experience," Travis said.

That maturing interest in farming machinery is being explored in a project to fully restore an antique tractor, located for sale by Grandad Borg.

"It's a Nuffield 342, from about 1961-63," he said. "It's been left outside before we got it, so it's a bit of a project, a work-in-progress. But it is a rarer model."

While Chris and Linda run a smaller lifestyle property with a few head of cattle, Travis spends a great deal of time working on his grandparents' farms.

"I'm there a lot, I was up there just last weekend helping Grandad, carting cane: he

needed a bit of a hand, so I thought I better go."

With a big grin, he recalls first getting to drive tractors on-farm as a younger lad.

"It was picking rocks. I was allowed to drive with everyone walking along with me."

Once he has secured a trade qualification Travis has a mind for farming.

"I would like to - love to - work back on the farm. The whole thing of being around the machinery," he mused. "That's why I started building the Lego, because I had the link between it, had the love for it. Because I couldn't be there all the time. So I did something that would make me feel like I am there."



A younger Travis on his Great Grandfather Tony Germanotta's Yanmar 1610D garden tractor. This tractor is still a part of the family.

"But I love doing it, I love helping out. My Grandads - both of them - teach me heaps of stuff. My uncle as well. So, you're just brought up with it, you're used to it and you have the passion for it."

In more recent times, Travis has been enjoying learning about the growing side of cane farming.

"I'm starting to understand the crop side of it, varieties, how it is grown, what certain things are used for. It's interesting." ■



Report Card released

The annual Healthy Rivers to Reef Partnership Mackay-Whitsunday-Isaac Report Card was released at mid-July launch event, with overall grades across the O'Connell, Pioneer and Plane Basins, and related inshore marine areas ranking B's and C's. Some key notes for our region are:



- Water quality indicators declined in the Murray-St Helens catchment around pesticides and chlorophyll-a. Pesticide scores improved slightly in the O'Connell Estuary and freshwater areas, although nutrient score declined in freshwater area.

- On a positive note, Pioneer Basin Freshwater area showed improvements to nutrient, pesticide and flow indicator scores, although the overall score remained a C (moderate). CANEGROWERS Mackay sees that as a reflection of the ongoing improvements that can come from engagement with programs like Smartcane BMP and Six Easy Steps, and encourages all members not yet fully accredited under BMP to get in touch with



their BMP officer and work through the remaining steps. The outcomes are positive for the land and waters where we work, and also in attracting new industry opportunities for our cane.

- Plane Creek and Carmila Creek Estuaries both scored a B (good). For Plane Creek, it



was the sixth year in a row to attain the score, while for Carmila Creek it was a decline from Very Good due to increased chlorophyll-a.

- Improvement to seagrass meadows in Central and Southern Inshore Marine areas.

Take a look at the report card at healthyriverstoreef.org.au ■

DAF Pesticide notes

Minimum training requirements for chemical use

Under amendments to the Chemical Usage (Agricultural and Veterinary) Control Regulation 2017 in 2020, relevant chemical training competency units were updated for all users of restricted chemical products (RCPs) and Schedule 7 (S7) chemicals (as classified in the Standard for the Uniform Scheduling of Medicines and Poisons).

The following year new provisions were made in the regulation requiring all users of agricultural and veterinary (agvet) chemicals containing S7 poisons to have undertaken training relevant to the particular type of chemical.

- Common S7 products used in Sugarcane are:
- Diquat Dibromide (Diquat herbicides)
- Flumioxazin (newly released herbicide active)
- some MSMA products (Herbicide)

- Paraquat Dichloride (Paraquat herbicides)
- Zinc Phosphide (some mouse and rat baits).

The following Australian qualification framework (AQF) nationally recognised units of competency are now required when using S7 products:

- AHCCHM307 - Prepare and apply chemicals to control pest, weeds and diseases
- AHCCHM304 - Transport and store chemicals.

Registered training organisations (RTOs) can provide accreditation in these competencies. By completing the accreditation, you will have nationally endorsed qualifications used to recognise and assess the skills and knowledge people need to perform effectively in the workplace. For more information on RTOs that deliver the competencies, search "commercial operator rto" at business.qld.gov.au.

For further information regarding S7 use requirements contact your local Department of Agriculture and Fisheries on 4999 8565. ■