

Interview

Top priority to beat global warming

In his book *Priority One, together we can beat global warming*, author Allan Yeomans highlights four strategies: (1) switch to ethanol and biodiesel; (2) switch to nuclear power; (3) stop trusting environmental and oil industry propaganda; and (4) switch to humus-producing agriculture. This interview was recorded at Yeomans Plow Company, Arundle, Queensland, on December 16 last year.

By ADAM WILLSON

Q: Why did you write a book about reversing global warming?

A: It was really because I had to. I had the knowledge of the development of soil and, as my hobby has always been flying and racing gliders, I developed considerable expertise in meteorological phenomena.

So it became apparent to me the relationship between the two. I had not met anyone with that combination of knowledge, so it became necessary that I write the book whether I wanted to or not.

Q: What are some key indicators that global warming is really happening?

A: Over the past few years, we have seen a massive increase in the severity of storms. In the formation of storms, hot air rises from the earth. As a consequence of global warming, high-altitude air temperatures actually fall.

This means a bubble of air that might form from the central core of a thunderstorm – a willy willy or a tornado – now goes up, say, thousands of metres higher. So the severity of the winds is amplified.

These stronger updrafts at these higher altitudes aids formation of hail and increases the size of individual hailstones. As a result of these cooler upper altitudes, cyclones will turn faster, updrafts will be stronger, lightning will be more severe and hail will be more pronounced.

We are seeing this constantly in our day-to-day experience. Hailstorms are now commonplace in places where they were a rarity. It is not so much the heating on the ground but the cooling in the upper atmosphere.

That has never been publicised to any great extent except in a couple of scientific journals. Two category five hurricanes in New Orleans, the United States, and recent hailstorms in Adelaide, Sydney and Brisbane are all typical results of upper-atmosphere cooling.

Q: You mentioned that the release of carbon dioxide into the atmosphere can be pinpointed to burning of fossil fuels and the worldwide decline in soil organic carbon levels. Can you explain this a little?

A: It is well-known and accepted by everybody that the

increase in carbon dioxide (CO₂) levels is caused by our use of fossil fuels. It is not so well-appreciated the contribution to global warming from the decline in soil fertility.

Humus in soils is basically a carbon compound (58% of humus is carbon). Humus breaks down from the use of agricultural chemicals and poor farming practices into CO₂ that leaches into the air.

To use a comparison, the decrease in soil fertility in the Great Plains in the United States since the 1930s is about the equivalent of the CO₂ that has come out of exhaust pipes of every car that has ever been made since Henry Ford's time.

Q: Dr Andrew Dlugolecki, director of the insurance company EGNU, predicts that by 2065 the cost of damages by global warming will exceed the value of the world's gross domestic product. Frightening figures. Are we heading into a possible ice age?

A: The formation of ice ages over the past million years or so is caused by very subtle shifts in the orbit and inclination of the Earth

to the sun. The effects are very small but over a few thousand years, they accumulate and we slowly go into an ice age and then slowly come out.

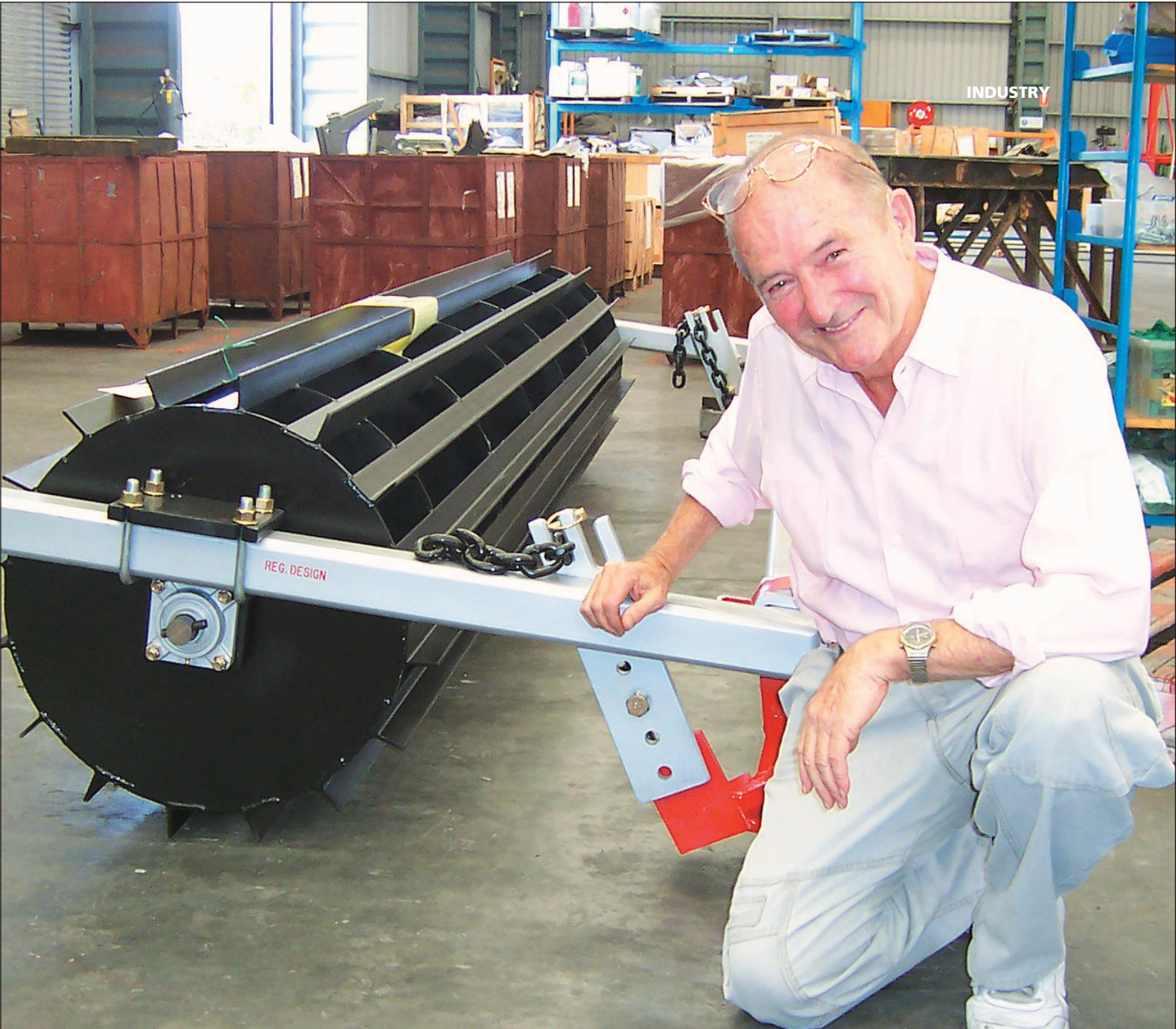
These ice ages are caused ultimately by changes in CO₂ levels in the atmosphere as a result of changes in plant growth patterns. Those changes alter the CO₂ concentration slightly up or down. What we are doing now is altering it to an extent that has never occurred for at least the past few million years.

In comparison to altering the orbits, this is having a massive effect. The possibility of us entering an ice age is infinitesimal because of the changing optics of the atmosphere through increased CO₂ concentration and consequential warming.

Q: You mentioned that soil fertility (in particular, humus) is the key to global stability but we can only play this card once. What do you mean by this?

A: You can increase the fertility of soil as used by the proponents of Keyline, organic and biological farmers all over the world. However, the depth of soil that can be rapidly improved is limited. If we increase the levels of humus in the soil and remove CO₂ from the atmosphere in the process, when that soil gets fertile it cannot be increased again. We

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Allan Yeomans beside one of his many inventions – the crumble roller.

can only go through this massive increase in soil fertility on a worldwide basis once.

Q: Keyline farming is a soil creation system designed to develop marginal land into fertile land rich in humus. It founded cell grazing, sensible land clearing, contour shelterbelts and is the underlying principle behind permaculture. What role has it had in Australian farming?

A: I've lectured to agricultural colleges in the US and it always amazes me how far the US is behind us in fertility and soil protection concepts. I would describe a typical farm in Australia and I would be asked the question if it is an organic or biological farm.

They are always amazed that we rotate crops and we have stock on a paddock for a period. What is noticeable driving through US farm areas is you can drive miles and miles and not see any farm fences. These areas haven't had grazing animals for nearly a century.

A high proportion of farms in this country now employ some form of Keyline principles – some technique or practices

advocated by Keyline half a century ago. My father introduced the chisel-plough concept into this country in the 1950s.

Today, probably 80% of crops grown in this country are on chisel-ploughed land. No other country does this. Soil-turning implements such as mouldboard ploughs are not sold at all in Australia any longer but they are sold in every other country in the world.

Organic and biological farmers are all generally massively increasing the fertility of their soil. Those farming practices have to be spread and people experienced in that type of farming practice have to teach the rest of the farming community. It's a call to arms.

Q: Finally, will you be writing another book?

A: No, I hate writing but this one I had to write. I never want to write another book again.

■ **Priority One** is available in hardback and online at <www.yeomansplow.com.au>. Adam Willson is the director of Soil Systems Australia P/L, which specialises in agronomic advice for modern organic growers; phone (07) 3716 0688;