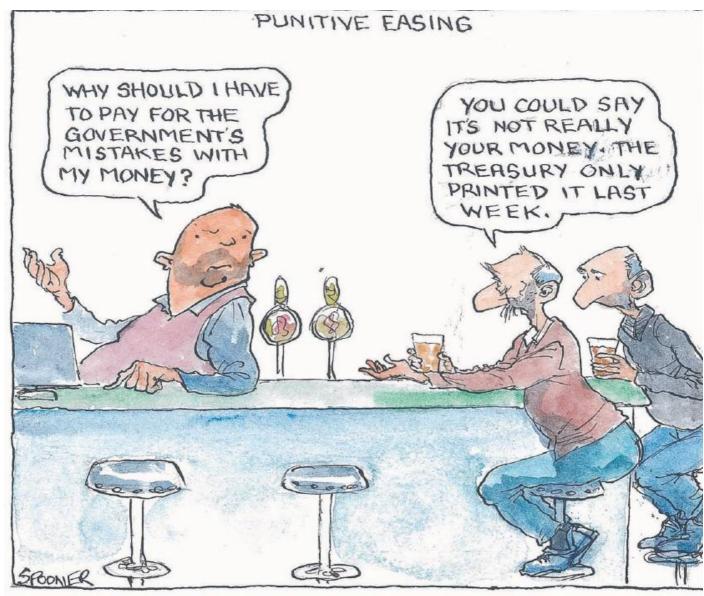
## **GREEN FARMING THE FUTURE**

JOHN DURIE



SPOONER'S WEEK





Sharp

We can reduce emissions while boosting diversity

The federal government's push to combine biodiversity with carbon regeneration fits like a glove with Nigel Sharp's life work in creating what amounts to a living study in natural capital.

Agriculture Minister David Littleproud earlier this year unveiled the Carbon+Biodiversity pilot, which will see farmers being paid for the biodiversity benefits of mixed-species tree plantings on top of

eligible carbon projects.

"Farmers have been doing biodiversity and carbon work for decades and it's time they were paid for it," Littleproud said.

Tiverton Agriculture chief Nigel Sharp this week teamed up with Denis Watson from Carbon Neutral to expand their respective operations nationally.

Tiverton will pay \$9m for a 65 per cent stake in Carbon Neutral.

The Tiverton portfolio includes the 33,000 hectare Great Cumbung Station JV with USbased Nature Conservancy, Picardy Station in Queensland and Sunland Fresh Fruits in Cobram near the Murray River.

The Tiverton station on the edge of Victoria's western districts is a sheep station which also serves as a revival sanctuary for bandicoots.

On the Orana property outside Bendigo Tiverton is developing a 1000 hectare olive grove nearby Rob McGavin's Boundary Bend property, together with 3500 hectares of seasonal crops and 1000 acres devoted to biodiversity.

The Great Cumbung on the Murray Darling is a joint venture with Nature Conservancy which is a giant wetlands area ideal for carbon generation.

Carbon Neutral is the project developer of the Yarra Yarra Biodiversity Corridor, the first project in Australia to achieve gold standard certification and believed to be the largest reforestation carbon project in Australia.

Watson said: "This partnership is about accelerating biodiversitysensitive carbon sequestration projects throughout Australia and Tiverton is our partner of choice to do so."

Sharp noted: "Denis has been a pioneer of successful terrestrial carbon sequestration projects in WA." The way Sharp puts it, "trees will sequester carbon, but will the trees alone sustain biodiversity? The oceans have done the heavy lifting on carbon but they are reaching their limits and we need soil and plants to do the work."

It's a life project Sharp has worked on since 1998 when he moved his family to French Island in Victoria's Western Port to live with the national wildlife in an island free of predators like foxes.

The Tiverton Agricultural Impact fund was set up in 2016 to "acquire and manage a portfolio of regenerative agriculture and food production assets, and pursue value chain optimisation opportunities related to these assets".

The fund "incorporates leading edge practices that increase biodiversity, enriches soils, supports carbon sequestration, improves water management, enhances ecosystem services and strengthens community resilience".

Sharp's next move after French Island was to Mt Rothwell in the You Yangs outside Geelong, a 470 hectare property that has served as a revival sanctuary for endangered species including the eastern quoll, the eastern barred bandicoot, the brush tailed rock wallaby and spiny rice flower.

The sanctuary is also a collaborative effort, with Ary Hoffmann at the University of Melbourne looking at the genetics of threatened species.

The business is based on exploiting and developing natural capital, which Sharp says is a way of thinking about nature as an asset.

Soil carbon is a key indicator of soil health and agricultural sustainability, so Sharp figures by working to increase soil carbon we are also improving the productivity and resilience of land.

One reason for Sharp's success is his ability to work with a range of different experts capitalising on their expertise while also helping them further their studies.

He works with the University of Western Sydney in a turtle breeding program in a Murray River orchard, Adrian Manning at ANU on rebuilding ecosystems and fauna ecology, and Latrobe on natural capital management, among other relationships.

The latter is a key project working out how to measure biodiversity projects, which together with established practice in carbon measurement helps the establishment of a carbon and biodiversity market.

Sharp grew up on a sheep farm near Hamilton in Victoria's Western Districts, which lays claim to being the wool capital of the world. His father Bill, while running the farm, worked for the state government's Soil Conservation Authority which is where Sharp developed his interest in the field.

In his VCE year at school he earned plaudits for his geography paper on the encroachment of Portland's sand dunes onto farming territory.

One of four boys, rather than go directly onto the land, his father suggested he get a real job and after completing his studies he became a rural property valuer.

After a seven-year stint at Knight Frank he and a friend set up their own industrial real estate business, which morphed into the Flinders Industrial Trust.

Biodiversity and land management became the focus.

Sharp followed these interests while at the same time attracting backers by showing it could all happen while making a profit.

"The approach we're taking is looking at larger landholdings and redesigning those from a regenerative approach," he said. "I feel a great deal of responsibility for the trust to be successful financially because I think that will open up the floodgates of investment."

He works by the "seven Cs", a checklist of investment and impact priorities: creatures, climate, corridors (connecting areas of similar habitat), community, culture, cashflow and capital. "Ideally, they will all be in harmony, or at least a balance," he said.

It takes time to get the different elements aligned in the one property but that is the ultimate aim.

It's a virtuous circle with high carbon soil retaining moisture and also boosting local rain which in turn helps sequester carbon.

The combination of biodiversity and carbon sequestration helps reduce emissions while also helping farm production and in the process helps save the planet.

Power point

A note this week on the government's Kurri Power station said at 2 per cent a year running time the station would have little effect on price. The station will be run by the Snowy Hydro station, which dominates the so-called caps or insurance market, and will increase its power by being the dominant player in a market now worth around \$11 a megawatt or \$55m a year.

There are 8760 hours in a year and one house uses six megawatts hours a year, with solar running for 30 per cent of the time, gas 50 per cent and coal 85 per cent.

One megawatt of power 24 hours a day then would power 1460 homes, one megawatt hour of solar just 438 homes and a one megawatt coal plant would power 1241 homes or 2.8 times as many.