

Why farm landscape resilience is important

By Alan Lauder

When anybody talks about adapting to climate change, ask them what adaptation means. The question has to be asked: are we concentrating too much on our response to the changed circumstances (reactive), instead of trying to reduce the effect/impact of a changing climate (proactive)?

Carbon grazing is about increasing eco-system resilience. Why is resilience important? A resilient system provides the capacity to absorb changed circumstances.

To quote Dr Leonie Pearson: "The alternative of a resilient system is a vulnerable system: when a system loses resilience it becomes precarious, or fragile to change effects, and even small influences can have disastrous effects"

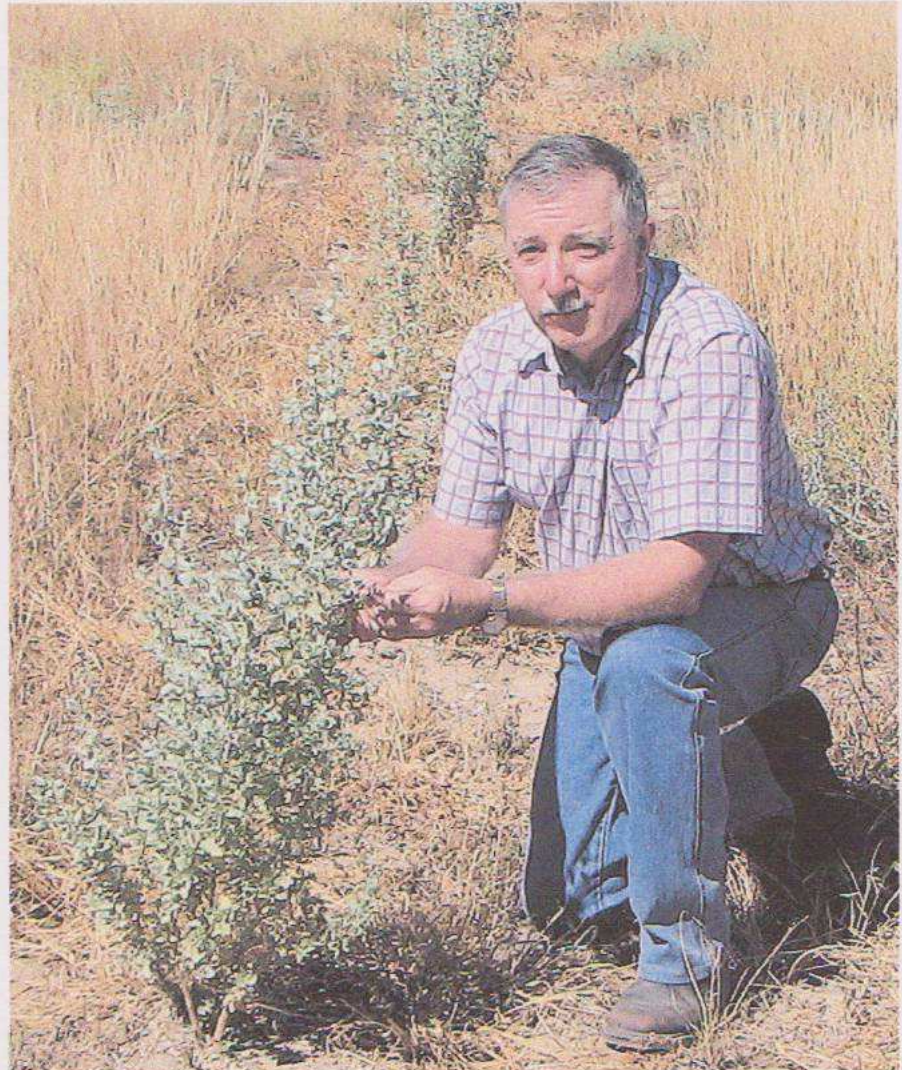
There are two components of resilience: adequate carbon stocks in the landscape and the correct mix of plants.

We need to think of carbon stocks in all the forms they take, including energy reserves in plants. The correct mix of plants is having the right balance of annuals and perennials. They need to be supported by the right balance of trees, which will change from one area to the next. Perennials can be both grasses and edible shrubs.

Get the plant mix right and moisture is sourced at all depths and carbon is collected at different tiers, which ensures resilience is maintained. With the right plant mix, this will continue to occur as the seasons change during the year. More importantly, with the right plant mix some moisture can be utilised and some carbon collected, even in dry years.

Rural producers have to be proactive in dealing with droughts in the same way that they have to be proactive in dealing with climate change.

To reduce the impact of drought, they rely on the same two



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One of the attributes of a resilient landscape is better water infiltration and storage, which relies on adequate levels of carbon in the soil. A resilient landscape contains plants with high water use efficiency in the mix. When the plant mix is right, the landscape is capable of utilising water whenever it arrives and wherever it is in the soil profile.

The best response to drought is to reduce its impact so that it arrives

later and breaks earlier. This approach has the added advantage of ensuring a landscape sometimes does not enter drought when others are caught.

Find out more:

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