

## Case Study

### Spanish cocksfoot, leading the way

farm info.

**Tasmanian producer, Humberston McKenzie, is an avid convert to the new Spanish cocksfoot cultivar Uplands, which is gathering significant interest not only in Tasmania, but also in southern mainland states.**

**Humberston relates his experience of establishing the new cultivar.**

"We had three years of drought leaving most of my pastures seriously degraded. I wanted to replant my property with a pasture grass species that would be productive, resilient to drought and frost, could stand up to pests and not be a toxicity risk to my stock.

I had heard good stories about the performance of a new grass recently developed by the Tasmanian Institute of Agricultural Research (TIAR) and decided to dip my toe in the water.

I planted around 8ha of cocksfoot 'Uplands' in April 2009 primarily as a seed crop for Tasglobal Seeds, but also to provide me with valuable grazing for the stock over the winter months.

The exercise has given me an appreciation of what this new grass is, what it can stand up to and what it can do.

After planting, I made the common observation that the grass was somewhat 'slow out of the blocks' compared to other commercial species I had used in the past.

Not discouraged and remembering the words of TIAR researcher Eric Hall, "Be patient with this grass", I watched as the paddock became saturated with the wettest Tasmanian winter-spring rains since World War 2.

**Producer:** Humberston McKenzie

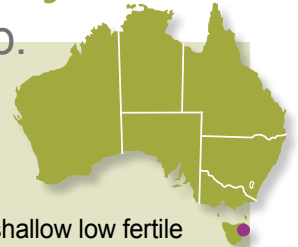
**Location:** 'Speyside' Fingal Valley - Tasmania

**Property size:** 2000 ha

**Soils:** Shallow soils with moderate fertility on flats, shallow low fertile slopes and bush-runs.

**Enterprises:** Mixed farming – wool, 1st cross prime lambs (4500 DSE), beef (2000 DSE) grains, opium poppies and pasture seeds.

**Pastures:** Perennial ryegrass, sub clover, tall fescue, red clover, lucerne, native pasture and Spanish cocksfoot 'Uplands'.



In the August-September period, my property 'Speyside' received 246mm of rain.

The 'slow starter' was now at over 3000kg/ha of estimated dry matter, standing in water and still growing.

So what does a farmer do? Well you graze it of course!

So in October the block was fed off over a fortnight to 80 yearling heifers and 400 Merino wethers. Chewed in to the ground and left in what can only be described as a muddy mess.

My expectation was that I might have overdone it, and the paddock wouldn't recover. But recover it did, and even better than it was before.

The paddock was irrigated in November and given a top up dose of nitrogen at 20kg of N/ha.

I harvested the paddock for seed at the end of January.

February rains after heading saw this winter-active species continue to grow.



TIAR Research Agronomist, Eric Hall (left) and Humberston McKenzie (right)

### key points

- Re-establishment with persistent perennials after the drought is a priority.
- Species selection should focus on drought tolerance and insect tolerance, feed production potential, palatability and minimal animal toxicity risks.

*“The cocksfoot ‘Uplands’ has proven to be a success in my situation”.*



*March 2010, Uplands response to summer rain at Speyside - tonnes of feed!*

By the first week of March I estimate I had 3000 - 4000kg/ha of dry matter across the paddock.

The plan was to run the windrows through the header a second time in early March to maximise seed yield.

The bulk of dry matter production over this six week period was so great, the grass had to be cut under the windrows so I could run them through the header again.

Looking to the future, I reckon I will be sowing a lot more cocksfoot across the farm.

Research by TIAR has shown it to be tough and able to survive the driest time people can remember in parts of the state.

It has shown here, it can take a fair bit of water logging, it doesn't have the associated toxicity issues like some of

the other grasses such as perennial ryegrass and phalaris and appears to be reasonably resilient to grub attack.

Maybe soon we'll see more people dancing to the tango of the Spanish cocksfoots!!!”

## science behind the story

There are a number of factors limiting pasture production in the eastern half of Tasmania, including low winter temperatures, pasture grubs and low rainfall. One of the major worrying factors is the decrease in annual rainfall over the past twenty years and drought becoming a regular occurrence.

The changing climatic conditions experienced across the region have meant that perennial ryegrass is no longer suitable and farmers need to look to better adapted perennial grass species to sow.

In response to this need, TIAR have bred and commercially released two Spanish cocksfoot cultivars Uplands<sup>A</sup> and Sendace<sup>A</sup>.

The new Spanish cocksfoot cultivars have much finer leaves than “traditional” cocksfoot cultivars and are very densely tillered. These plants have a very high

level of drought and cold tolerance and tolerance to pasture grubs.

They have the ability to shut down over summer when moisture is lacking, but will respond rapidly when the autumn break arrives. It grows actively through to late spring, producing a large bulk of high protein and energy forage with high levels of digestibility and nutritive value.

EverGraze in Tasmania established a Supporting Site on the property ‘Weedington’ in the Oatlands district of the Midlands in September 2008, demonstrating these new cultivars of Spanish cocksfoot sown with hedgerows of hairy Canary clover (*Dorycnium hirsutum*).

The site is around 2ha in area and was established under extremely difficult conditions.

The successful establishment of Spanish cocksfoot in this area has

demonstrated the suitability of this grass to establish in a challenging arid environment and the resilience of the two cultivars sown has greatly impressed the property owner and others who have visited the site.

The key messages I would give to producers wishing to grow these new Spanish cocksfoot cultivars are;

- sow shallow, < 10mm and
- be patient,

The seedlings are slow to get going, but once established they will be there for a long time.

*Fact sheets on cocksfoot and other perennials are available at our website [www.evergraze.com.au](http://www.evergraze.com.au)*

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EverGraze is a Future Farm Industries CRC, MLA and AWI research and delivery partnership

