Sustainable Cotton Farms

COTTON FARMERS ARE WATER SAVERS

Australian cotton growers use 40% less water today than ten years ago, due to the continuous adoption of innovative tools and techniques to save water while increasing yields.

They use cotton specially bred for Australian conditions and sophisticated weather forecasting software to match crop area with water availability.

Some crops are irrigated to increase plant growth and yield. Sophisticated irrigation monitoring and scheduling technologies are used to deliver water efficiently to the plant. Information provided (via satellite) by soil moisture and plant temperature probes reduce over-watering. Polymers are used on dams to reduce evaporation and irrigation channels are lined to reduce water loss through seepage.

Growers make informed daily decisions about water, using data, science and technology.

Read how cotton farmer Mat Stott has made his family farm 'Point Farms' more water efficient at Darlington Point, NSW
http://tinyurl.com/n8dvktu

ALWAYS IMPROVING

The Australian cotton industry is committed to continual improvement.

For each bale of cotton, growers pay a levy to the Australian Cotton Research & Development Corporation. The Australian government matches this to create a pool of cotton research funds. Growers advise on which areas most need research to meet challenges for the industry.

The science and research is shared with growers through the cotton industry's Best Management Practices program (myBMP). Through this tool and others, cotton growers closely monitor and track their performance across the three pillars of sustainability: people, the environment and productivity.

Read how cotton grower Nigel Corish uses myBMP to evolve and innovate at Yambocully at Goondiwindi QLD at:
http://tinyurl.com/k3jrsdc

COTTON GROWERS ARE SCIENTISTS TOO

Growers are constantly finding new ways to save resources, and grow better and more cotton in ways that ensure the farm will be productive long into the future. To do so, their daily decisions are based on best management practices underpinned by evidence and science.

Hear how evidence and science inform the decisions of growers John Cameron (Bongeen, QLD) and Georgie Krieg (Brookstead, QLD):
http://tinyurl.com/l4fj9vb

BIODIVERSITY IN THE BACK PADDOCK

Australian cotton farms are vibrant ecosystems that support the natural environment, pastures and crop production. They maintain a healthy balance of life including plants, animals, insects, fish, bacteria, fungi and micro-organisms.

Cotton growers are land carers on a large scale, with about 40% of their farms being native vegetation. They strategically plant native vegetation to keep waterways healthy, improve soils and extend habitat for birds and animals.

Growers use integrated pest management techniques including refuge crops and biotechnology to minimise chemical use and encourage beneficial insects, which naturally control pests of cotton. Soil health is managed by minimising soil disruption and retaining organic matter which preserves structure and minimises salinity, acidity, sodicity. Farmers add to the soil what cotton plants take out by growing cotton in rotation with other crops to increase soil nutrients and reduce disease. Sometimes fields are left fallow to give them a rest.

Learn how cotton farmer Andrew Watson (Boggabri, NSW) has increased the biodiversity on his family farm at:
http://youtu.be/MYiPPAw_d0s

Cotton growers are land carers on a large scale with about 40% of their farms being native vegetation.

REDUCING GREENHOUSE GAS EMISSIONS

Cotton farms convert more carbon from the atmosphere than they put into it due to the large number of trees and plants on-farm. Cotton plants sequester carbon in their lint and seed which are exported and used. Reducing carbon emissions further still is important to growers, though.

Emissions are being reduced by updating machinery such as the round bale picker, which replaces three machines with one. Fuel used for pumps is reduced through water efficiency gains. To minimise vehicle emissions growers use minimum till systems which reduce the passes machines make over the soil. Soil mapping allowing precision irrigation reduces the chance of the crop becoming waterlogged, leading to methane emissions. Instead of applying fertiliser to improve the soil with minerals like nitrogen, many growers look to alternative sources such as planting legumes in rotation with their cotton crop.

Tools like carbon calculators help growers estimate their greenhouse gas emissions and set goals for improvement each year.

MEET SOME OF THE PEOPLE WHO GROW COTTON

Richie Quigley

Richie lives on a cutting-edge cotton farm near Trangie in New South Wales. In partnership with his parents and brothers, Richie also grows wheat, sorghum and cattle.

Watch: http://youtu.be/2yEpXeBVVg4

Liz Lobsey

Liz grew up in Toowoomba, in southern Queensland. Now she is the right hand woman to many growers advising on how to produce the best crop.

Watch: http://youtu.be/YWbVzdDxWHo

To find out about more great people involved in the cotton industry visit
http://cottonaustralia.com.au/cotton-classroom/people-in-cotton

COTTON CLASSROOM

Cotton Australia's Cotton Classroom site has information, lessons, units, education kits, classroom videos and presentations and much more. Visit at:
http://cottonaustralia.com.au/cotton-classroom

COTTON AUSTRALIA

Illustration by Liz Grant