

HCPSL

Herbert Cane Productivity Services Ltd.

**Annual General
Meeting- 2018.**

AGM business

- ▶ Welcome
- ▶ Apologies
- ▶ Minutes of the previous meeting
- ▶ Business arising out of the minutes
- ▶ Annual Report and Financial Statements
- ▶ Board chairman's report
- ▶ Business managers report
- ▶ Guest speaker- Dr. Nicole Robinson from the University of Queensland. Topic-
“The future in nitrogen fertilisation- next generation fertilisers”.

Board chairman's report

ADMINISTRATION



- ▶ The 2017/18 financials were duly audited and a copy is available for viewing.
- ▶ Grower membership is ~99.97% of area harvested- the largest grower membership of any voluntary Herbert industry support agency.
- ▶ Wilmar continues to be a member, matching dollar for dollar grower funding in the core service program.



ADMINISTRATION



- ▶ The 2017/18 budget has been approved by the HCPSL company directors.
- ▶ The total budget was set at \$8.46/ha for each the grower and miller to pay. Total of \$16.92/ha. There is no change in the service fee for the past 3 years.
- ▶ The external funded component of the HCPSL business is now significant, with external funding coming from Government projects, NRM groups, private companies (agri-chemical and fertiliser companies) and universities.



Staffing



Core funded staff:

- ▶ Lawrence Di Bella (Manager)
- ▶ Sue Becarris (Administration Officer- 4 days a week)
- ▶ Sandra Coco (Resource Officer)
- ▶ Graeme Holzberger (Field Agronomist- Grower Services)
- ▶ Tony Mc Clintock (Field Agronomist- Grower Services)
- ▶ Adam Royle (Extension Agronomist- Crop Nutrition and Water Quality)
- ▶ Sam Sellick (Field Agronomist- Variety Development)
- ▶ Mike Sefton (Geospatial and Data Systems Officer)
- ▶ Sam Lamari (field worker on farms and seed cane production- casual)
- ▶ Other casual fieldworkers who assist with seed cane production

Externally funded staff:

- ▶ Richard Hobbs (Extension Agronomist- Farming Systems and Soil Health Officer)
- ▶ Jarrod Sartor (WTSIP Extension Officer)
- ▶ Leanne Carr (WTSIP Extension Officer)
- ▶ Melissa Royle (WTSIP Extension Support Officer- 2.5 days a week)
- ▶ Rod Nielson (GIS Officer)
- ▶ Megan Zamhel (Project Catalyst Support Officer)
- ▶ Minka Ibanez (Field Technician- casual)
- ▶ Shannon O'Brien (Extension agronomist- special projects)



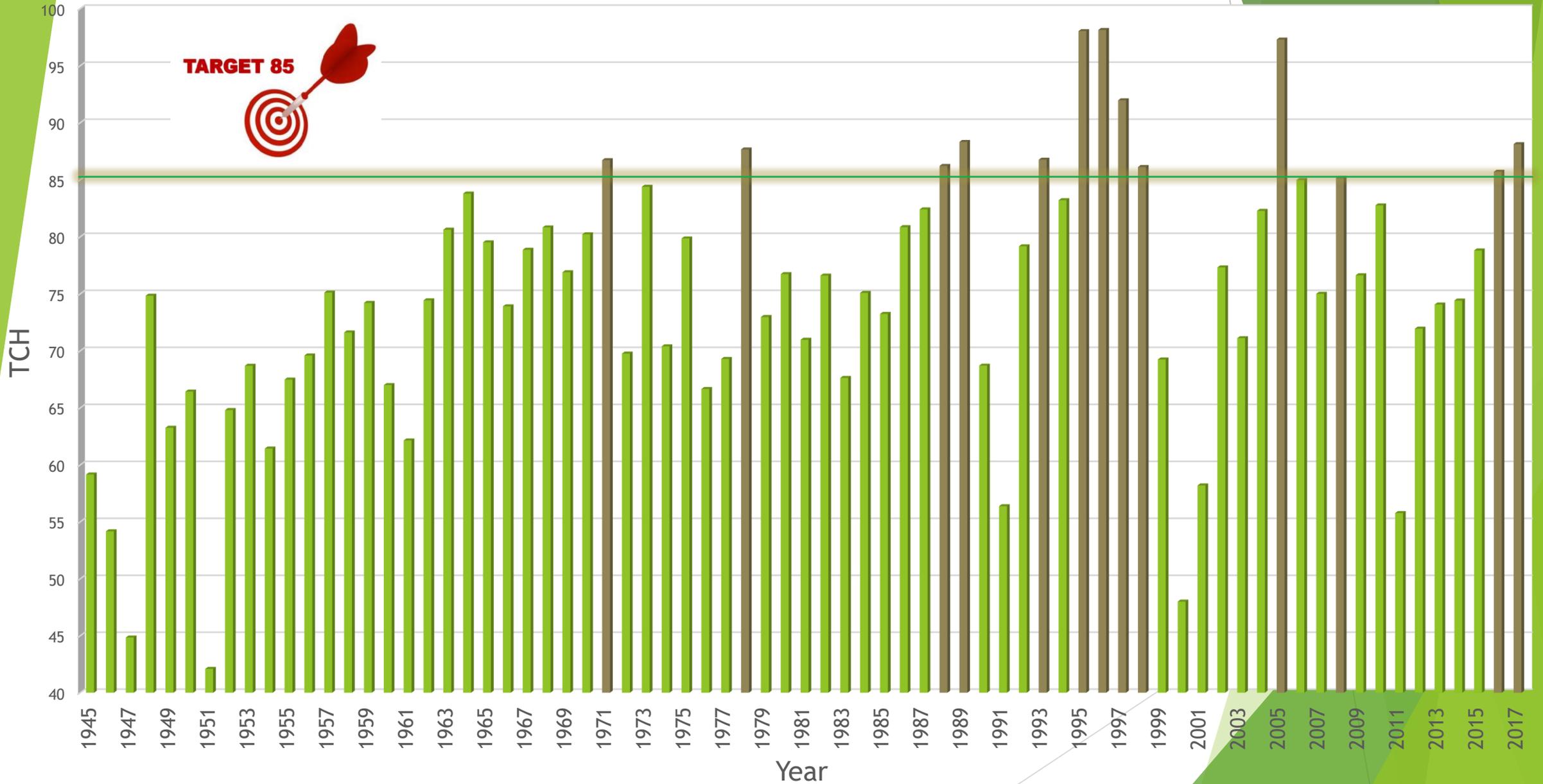
TARGET 85



A HCPSL productivity initiative to get the Herbert industry to an 85tch district average, in a sustainable manner. Launched at the 2013 AGM.

The HCPSL Board undertook a Strategic Planning Process in early 2018 to reevaluate the Herbert regions progress and lay the foundations for the future.

Herbert Historical Productivity





2018-20
Strategic Plan

Our Strategy Management Process

Impact

Engage. Inspire. Execute.

Getting started: ✓ Planning team ✓ Create schedule ✓ Gather documents



OnStrategy



Who was engaged in the Strategic Planning Process?

- ▶ Over 150 industry stakeholders were consulted as a part of the process.
- ▶ Who are the stakeholders consulted?
 - ▶ Grass roots growers
 - ▶ Wilmar management
 - ▶ Government representatives
 - ▶ Key industry partners



TARGET 85



The HCPSL Board has approved the company and Herbert Regional Strategy to 2020 to be rolled out through the **Target 85 program.**

HCPSL Strategic Plan Summary 2018-2020



Why we exist

Our mission

To facilitate an increase in productivity, profitability and sustainability within the Herbert sugarcane industry by providing agronomic and technical services.

Where we want to be in the future

Our vision

To be recognized throughout the Herbert district as the primary independent resource for agronomic advice, extension and support in regard to the whole of sugarcane value chain.

What's important to our industry

Our Goals



1. Achieve an annual production of **85 tonnes cane/ha**, through the activities under the **Target 85** program.
2. Achieve a sustainable and environmentally sound sugarcane production system.

KEY TARGET AREAS (KTA)

KTA1: Clean seed and variety development

1. Approved (clean) seed provision
2. Cane variety development

KTA2: Agronomic and industry services

1. Crop agronomy advice
2. Cane harvest systems and advice
3. Crop pest and disease advice
4. Crop nutrition advice
5. Farm drainage design
6. Precision Agricultural Services (ie. GPS basestation network, drone imagery, soil and yield mapping)
7. Rotational crop management and advice
8. Specific soil health advice

KTA3: Sustainability & Environmental Stewardship

1. Support environmental monitoring specific to cane production in the Herbert
2. Support and/or deliver activities associated with Smartcane BMP
3. Development of industry Best Practice techniques relevant to the Herbert and Australian sugarcane industry
4. Biosecurity

KTA4: Industry capacity, knowledge and technology transfer, extension and adoption

- Knowledge and technology transfer, extension and adoption to the Herbert in the areas of:-
- Crop agronomy
 - Crop harvesting systems
 - Crop pest and disease
 - Crop nutrition
 - Farming systems
 - Soil health
 - Irrigation advice
 - Rotational crop management
 - Drainage
 - Supporting women in the industry
 - Supporting youth in the industry
 - Supporting new graduates

KTA5: Strategic Alliances

1. Industry groups
 - CANEGROWERS
 - ACFA
 - Wilmar
 - Other Productivity Companies
 - SRA
2. Government agencies
3. NRM groups
4. Co-operative Research Centres (CRC's)
5. Universities
6. Private Companies

The HCPSL Strategic Planning Process



HCPSL mission

To facilitate an increase in productivity, profitability and sustainability within the Herbert sugarcane industry by providing agronomic and technical services.



The HCPSL Strategic Planning Process



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To be recognized throughout the Herbert district as the primary independent resource for agronomic advice, extension and support in regard to the whole of sugarcane value chain.



The HCPSL Strategic Planning Process



Our Goals

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2. Achieve a sustainable and environmentally sound sugarcane production system.



TARGET 85



Key Target Areas (KTA) under the
Target 85 program.

Key Target Areas (KTA)



KTA1: Clean seed and variety development

- 1. Approved (clean) seed provision**
- 2. Cane variety development**



Key Target Areas



KTA2: Agronomic and industry services

1. Crop agronomy advice
2. Cane harvest systems and advice
3. Crop pest and disease advice
4. Crop nutrition advice
5. Farm drainage design
6. Precision Agricultural Services (ie. GPS basestation network, drone imagery, soil and yield mapping)
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Key Target Areas



KTA3: Sustainability & Environmental Stewardship

- 1.Support environmental monitoring specific to cane production in the Herbert**
- 2.Support and/or deliver activities associated with Smartcane BMP**
- 3.Development of industry Best Practice techniques relevant to the Herbert and Australian sugarcane industry**
- 4.Biosecurity**



Key Target Areas



KTA4: Industry capacity, knowledge and technology transfer, extension and adoption

Knowledge and technology transfer, extension and adoption to the Herbert in the areas of:-

- Crop agronomy
- Crop harvesting systems
- Crop pest and disease
- Crop nutrition
- Farming systems
- Soil health
- Irrigation advice
- Rotational crop management
- Drainage
- Supporting women in the industry
- Supporting youth in the industry
- Supporting new graduates



Key Target Areas



KTA5: Strategic Alliances

1. Industry groups

- CANEGROWERS
- ACFA
- Wilmar
- Other Productivity Companies
- SRA
- WTSIP

2. Government agencies

3. NRM groups

4. Co-operative Research Centres (CRC's)

5. Universities

6. Private Companies



Top 6 Research and Development priorities identified (in ranked order)

1. Soil health
2. Varieties
3. Harvesting
4. Rotational crops with sugarcane and value adding
5. Pest management
6. Precision agriculture



The top 9 issues facing the Herbert cane industry (ranked in order of priority):



1. "Right to Farm"-

Government regulations

Nutrient application (especially nitrogen)

Pesticide management

Grower uptake of Smartcane BMP program or similar programs

2. Monetary returns-

Diminishing returns for cane

Increasing input costs

Low sugar price

Crop variability

Lack of value adding opportunities

Seeking opportunities to have cash crops in rotation with sugarcane



The top 9 issues facing the Herbert cane industry (ranked in order of priority):



3. Demographics/ labour issues-

- Aging industry

- Succession concerns (planting, growing, harvesting, milling)

- Need youth engagement in industry

- Lack of available planting contractors

4. Data ownership and use-

- Control of data by millers (growers not happy with current situation)

- Growers wanting control of farm data (from Ag. suppliers and miller)

- Use of data to increase productivity and cost reductions (through PA activities) is important to growers

- Simple systems that the industry can use for data collection/ acquisition and use



The top 9 issues facing the Herbert cane industry (ranked in order of priority):

5. Varieties-

Suitability

Ratooning

Risk

Disease resistance (*Pachymetra*)

6. Soil health-

Monoculture

General understanding

Compaction

7. Nutrients-

Reef Regulations (nitrogen)

Costs

Concerns about 6ES guidelines



The top 9 issues facing the Herbert cane industry (ranked in order of priority):



8. Harvesting-

Time of harvest

Cane quality

Cane and sugar losses

Haulout dictating terms and conditions associated with harvesting

9. Mill performance



Special thanks



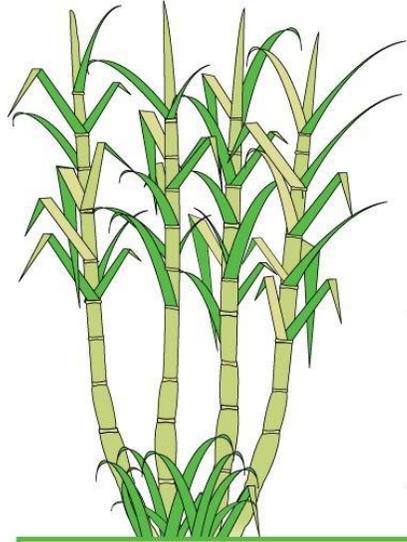
On-behalf of the Board we would like to thank the following:

* Our members for their on-going support

* Support agencies who have invested in HCPSL and the region

* The HCPSL staff





HCPSL

Herbert Cane Productivity Services Ltd.

Annual General Meeting- 2018.

The Manager's report

TARGET 85



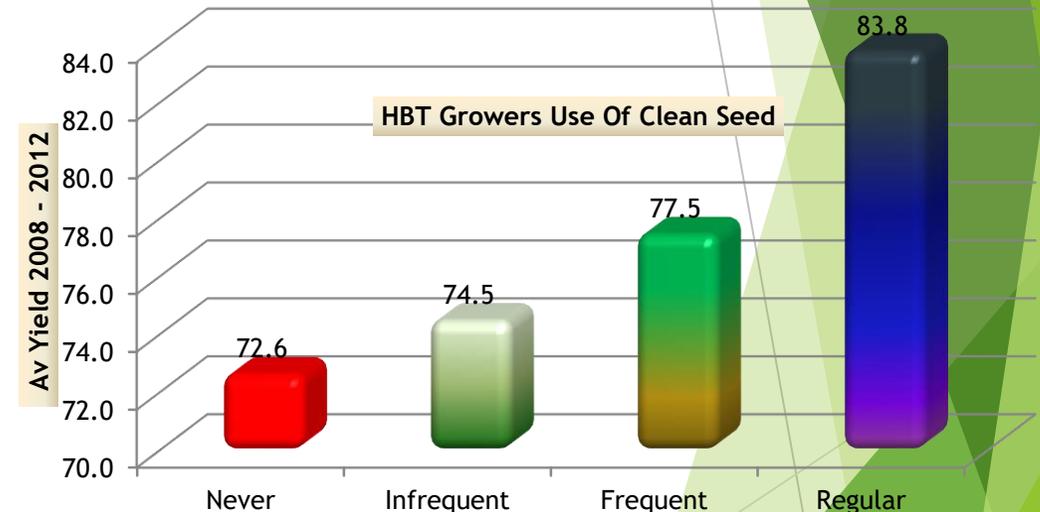
ACHIEVEMENTS THIS YEAR

Managing pest and diseases

Investment in Approved Seed provision

- 2014- 1200 tonnes of cane purchased
200 tissue cultured plants purchased
110 tonnes hot water treated
- 2015- 842 tonnes of cane purchased
3500 tissue cultured plants purchased
93 tonnes hot water treated
- 2016- 1012 tonnes of cane purchased
2500 tissue cultured plants purchased
73 tonnes hot water treated
- 2017- 1169 tonnes of cane purchased
104 tonnes hot water treated
- 2018- 1183 tonnes of cane purchased
90 tonnes hot water treated

Productivity Benefits Of Clean Seed



Investment in Approved Seed provision



- ▶ HCPSL has purchased a new tractor, plant cutter and blower in 2018 for use in plots- funds come from company reserves.
- ▶ The HCPSL Board has approved a maintenance program for the hot water treatment tanks facilities- to commence soon.

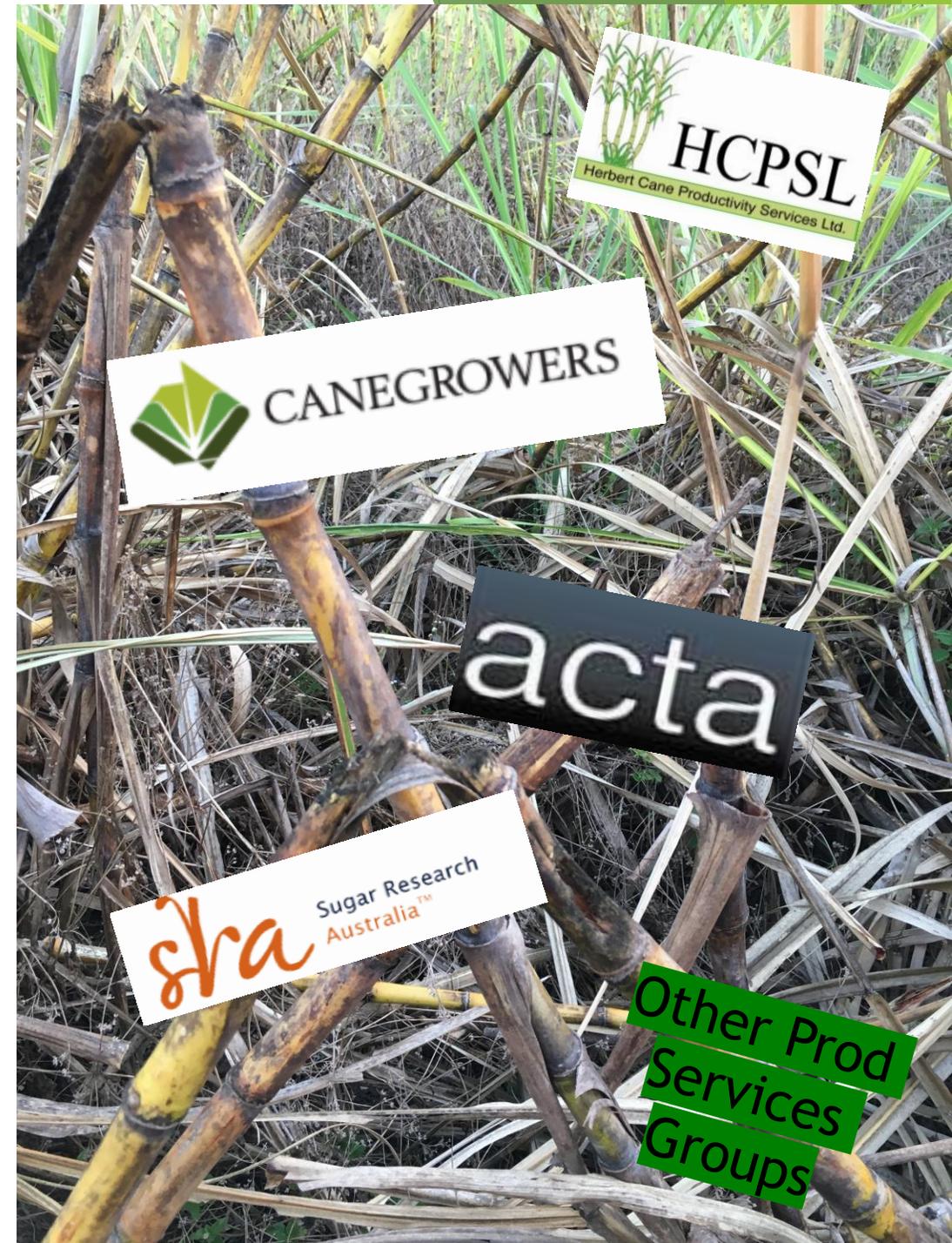


Rat management

- ▶ HCPSL, Mackay Area Productivity Services (MAPS), ACTA and CANEGROWERS Brisbane worked together to achieve an aerial rat baiting permit for the Mackay and Herbert regions only, in 2017.

The permit was extended state wide in 2018, with assistance of SRA and other Productivity Services Groups.

- ▶ Rat damage has now become the largest economic pest for the Herbert cane industry.
- ▶ Over 550ha have been rat baited to date, in the Herbert, since the permit.



Feral pig management

Hinchinbrook Community Feral Pig Management Program:

- ▶ This is a continuing program with a huge success rate.
- ▶ Existing members continue to pay into the program, with the exception of National Parks (NP).
- ▶ The Program continued to attract funding from the Nest to Ocean Program to manage feral pigs in coastal areas managed by NP and DNRM.
- ▶ Over 400 pigs were controlled during the period
- ▶ The environment, industry and the community significantly benefit from this program



YCS research



- HCPSL continues to work with SRA.
- Leads are now being followed up.
- A variety x time of planting/harvesting time was harvested this year to assess genetic differences to YCS.

YCS has been a difficult syndrome to research.

Variety development and improvement

Variety development and improvement

Work undertaken by HCPSL:

- Undertook variety recommendations for ~30% of the area planted through QCANE SELECT.
- Funded and established the following agronomic trials:
 - 2017- SRA5 nitrogen rate trial- Stone River
 - 2018-Variety x crop ripener trial- Abergowrie

Work undertaken with the Wilmar Plant Breeding Team:

- Provide land and maintain the Wilmar genetic collection and crossing material at the HCPSL Macknade Farm

Variety development and improvement

Work undertaken with SRA Plant Breeding Team:

- Funded the RVT program in the Herbert, which consists of 8 trials across the Herbert to assess ratooning of varieties under difficult conditions.
- Funded the planting of the RVT YCS trial site in the Herbert and support SRA research staff.
- Supported SRA through:
 - The Introgression plant breeding effort in the Herbert, through the provision of land and glasshouses at the HCPSL Macknade- at no cost to SRA.
 - HCPSL funding of the third ratoon harvest of the SRA FAT trials across the Herbert.

Managing Soil Health



SRA funded Soil Health Project

This is a joint project between SRA research group, HCPSL, BPS, Wilmar, Universities of Queensland and Southern Queensland and QDAF.

This project will define what is soil health and develop tools and strategies to improve soil health in a sustainable and economic manner.

Dr Davey Olsen (SRA research group) leads this large industry project. Richard Hobbs (HCPSL) is the Herbert Soil Health Officer.



Digging Deeper workshops- with David Hardwick

Funded by:



Wet Tropics
Sugar Industry
Partnership



SOIL CRC

Performance through collaboration



CRC partner and Grower Group

- ▶ A 10 year funded national program investing into soils and soil health.
- ▶ HCPSL and BPS are the only sugarcane partners nationally.
- ▶ Major project- “To assess the root biosphere benefits due to mixed fallow cropping”. HCPSL is a major project partner in this project. Project commences late- 2018.



Improving water quality through improved land management practices

Extension activities: WTSIP



Wet Tropics
Sugar Industry
Partnership

Employment of Jarrod Sartor (full time), Leanne Carr (full time) and Shannon O'Brien (40% of her time) as WTSIP Extension Officers and Melissa Royle (50% of her time) as Extension Support Officer.

Role-

1. Assist growers with nutrient management planning
2. Assist growers adopt better pesticide application and IPM programs
3. Assist growers with specific Reef water quality grants projects
4. Industry training and development

Key partners:





Project Catalyst

Project Catalyst supported the following activities:

- Employment of Megan Zamhel- as the Project Support Officer
- Supported 16 grower driven trials
- Supported the Herbert and Tully grower update, held in Cardwell
- Supported the SPAA HCPSL PA event
- The 2018 HCPSL Herbert Walk and Talk event
- The September 2018 Soil Health Shed meetings

Project Catalyst Partners

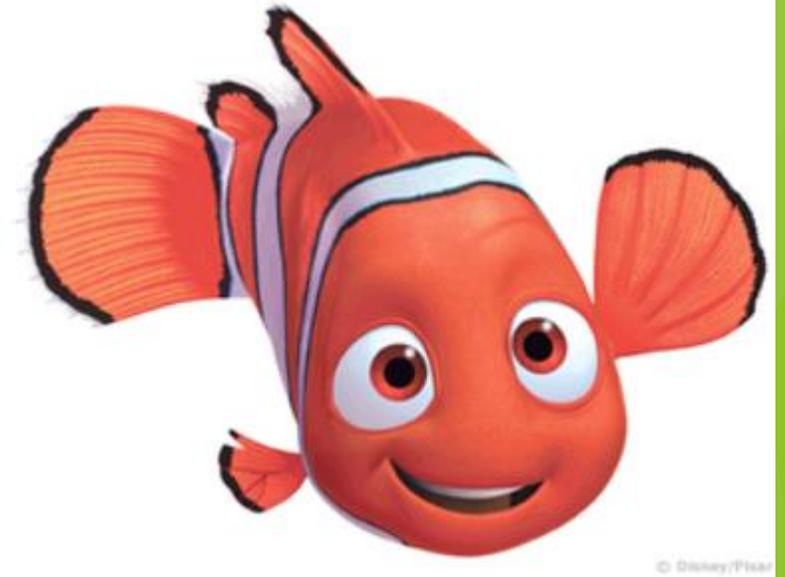


Extension activities- Project NEMO

- ▶ Aim: To improve grower practices in relation to nitrogen use, while achieving water quality outcomes.
- ▶ 3 year project funded by the Queensland Government- Now completed.
- ▶ Adam Royle (Captain NEMO) led this project.

Activities:

- ▶ Working with growers through one on one and group processes
- ▶ 12 demonstrations sites have been established to date
- ▶ Rainfall simulation study
- ▶ Water quality monitoring



The Herbert Water Quality Project



- ▶ HCPSL continues to invest in water quality monitoring from cane lands. This data will assist industry make informed decisions
- ▶ The 2017-18 project partners were:





Precision Agriculture





Precision agriculture- HCPSL base station network

Capturing trial data- drone technology

- ▶ The HCPSL drone has been used to capture trial data.
- ▶ The drone is hired out at commercial rates to SRA and other commercial groups.

Flood damage assessment

HCPSL worked with Queensland Government DAF staff and CANEGROWERS Herbert River to develop an accurate flood damage assessment for the March 2018 flood.





Precision Agriculture- soil mapping

Soil mapping

- ▶ HCPSL purchased a Dualem 421S through a Terrain NRM grant and HCPSL funds. Mossman Agricultural Services (MAS) supported the HCPSL project application with Terrain NRM.
- ▶ To date individual growers, SRA, UNSW and MAS have utilized the fee for service program offered by HCPSL.
- ▶ HCPSL worked the UNSW to develop soil mapping protocols and analytics.



Soil mapping

- ▶ The use of the data generated by the Dualem 421S unit, conjunction with other geo-spatial data (like yield monitoring) has been used to develop variable rate soil amendment maps.
- ▶ A number of cane blocks in the Herbert have had variable rate soil amendment applications.
- ▶ Near 1000 ha have been mapped to date.



MIRIWANNI LIME Pty. Ltd.



Precision Agriculture- Site Specific Management



- ▶ HCPSL undertook projects with:
 - ▶ CSIRO (SRA funded project) to develop management zones based upon HCPSL yield maps.
 - ▶ UNSW (Terrain and HCPSL funded project) to manage sodic soils south of Ingham.



UNSW
AUSTRALIA



Data management and analysis



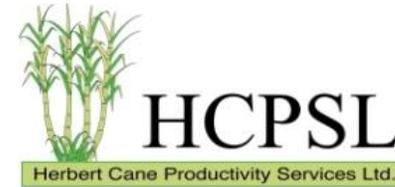
- ▶ HCPSL website and Facebook site
- ▶ Continuation of the HCPSL Yield Monitoring system
- ▶ HCPSL collects grower data and analyses it to:
 - ▶ Target its extension effort
 - ▶ Identify knowledge gaps
 - ▶ Validate industry practices
 - ▶ Support industry issues (like feral pigs and rats)
 - ▶ Defend the industry position

Supporting groups:



Developing & extending knowledge- nutrition

Developing & extending knowledge-nutrition



THE UNIVERSITY OF QUEENSLAND AUSTRALIA



Developing & extending knowledge- nutrition



Activities:

- ▶ Development of a Decision Support Tool for the Use of EEF's (funded by SRA funding unit and managed by CSIRO)
- ▶ Project NEMO- working with growers to improve NUE (funded by QLD govt.)
- ▶ The assessment of nitrogen loss pathways glasshouse experiment- project # 2 (funded by DOW Agrosiences)
- ▶ The assessment of nitrogen loss pathways of a new fertilizer product-glasshouse experiment project #3 (funded by SOS Bio)
- ▶ WTSIP Nutrient Management Planning
- ▶ SRA funded- DSIT Legume management trial
- ▶ UQ funded legume nitrogen trials
- ▶ Silica research (funded by Agripower)
- ▶ EEF60 project (funded by Australian Govt, managed by CANEGROWERS Brisbane)



Developing & extending knowledge- EEF60 Project

- ▶ The project was established to assess the benefits of Enhanced Efficiency Fertilisers (EEF) across the Great Barrier Reef Catchment areas.
- ▶ CANEGROWERS Brisbane lead the project, with SRA leading the research effort and HCPSL providing the extension activities for the Herbert and Tully areas.
- ▶ Shannon O'Brien (HCPSL Extension Agronomist- Special Projects, is funded 50% on this project)
- ▶ Dr. Jullian Connellan (leads the SRA research effort for the Herbert and FNQ)



Herbert
project
partners:



Developing and extending knowledge- pesticides

Developing and extending knowledge- pesticides

Activities undertaken this year:

- ▶ Auschem training (fee for service)
- ▶ IWM training under WTSIP program
- ▶ Weed management planning under the WTSIP program
- ▶ Release of Amitron- HCPSL was contracted to undertake 3 trials as a part of the product development work (funded by Arysta)
- ▶ Conducted a glasshouse experiment to assess fungicides in high CEC soils (funded by Nufarm)
- ▶ Smut fungicide research (funded by Nufarm)
- ▶ Established a crop ripener trial in the Abergowrie area in 2018 (funded by HCPSL)



Key partners:



Dow AgroSciences



Extending knowledge



Industry update and harvesting forum

Hosted by:





HCPSL Herbert Walk and Talk



Sponsored by:



Wet Tropics
Sugar Industry
Partnership

MIRIWinni LIME Pty. Ltd.



SPAA HCPSL PA workshop

Held on the 7th of September,
2018, with the Delair demo held
on the 6th of September.

Sponsored by:
WTSIP, Project Catalyst, SRA,
Smartcane BMP, and Wilmar



Investment into youth.

- ▶ Supported the Cane Section at the Ingham Show.
- ▶ Support of the U18 Cane Section of the Ingham Show.
- ▶ School visits by staff.
- ▶ Support of a Herbert River Young Farmers Group.
- ▶ Hosted Ingham High and GSM secondary students throughout the year at various events.
- ▶ Hosted university students from Texas University.
- ▶ Hinchinbrook Chamber of Commerce and Shire Council- Future Leaders Program.





Special thanks

The HCPSL Board members for their support and involvement.



Michael Waring



Ian Davies



Michael Reinaudo



Jim Kirchner

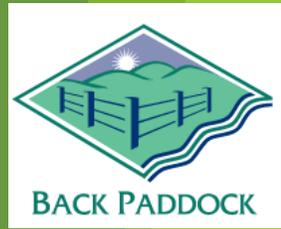
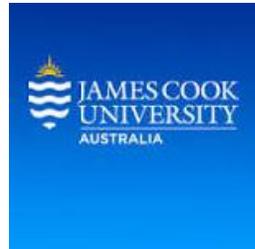


Nicole Butler



Vince Russo

Key partners in 2017-18:



Project Catalyst Partners





**Thanks to the
HCPSL team-
job well done**

Conclusion

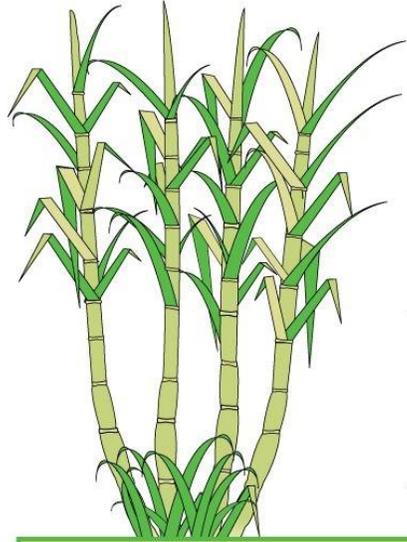
The HCPSL aim is to continue to strive to make things better, through the services it provides for its members.

Thanks for your on-going support.



**Thank you!
Questions ?**





HCPSL

Herbert Cane Productivity Services Ltd.

Annual General Meeting- 2018.