

THE CANE STALK

December 2022



Message from the Company Manager 2022 HCPSSL year in review

At the start of 2022 things looked rosy with the prospect of a high yielding crop and a good sugar price, but turned out to be a year that became more challenging as the year progressed with high input costs, continued rain during the planting and harvesting season, lower than anticipated CCS, a rat plague and standover.

On a positive note, HCPSSL delivered the following services to industry in 2022:

Disease management:

- Distributed 4,335.75t of Approved Clean Seed
- Hot water treated 40.5t of cane
- Undertook 2707 RSD samples for growers
- Distributed 19,250 tissue culture plants



Projects:

- Delivered under Project CaNE- 150 NMP and to 298 growers engaged
- Delivered under Project Catalyst- 26 NMP and 3 innovation trials
- Completed the Landcare project investigating the use of organic waste streams in a sugarcane system
- Achieved 3 matches, with 3 retiring growers being matched with 3 new growers under the Cultivate Farms project.
- Continued working with the CRC Soils to achieve positive outcomes in soil management.
- Completed activities associated with Project Squealer.

Pest management:

- Obtained or supported the applications for permits to manage rats
- Euthanized over 1200+ pigs through the Hinchinbrook Community Feral Pig Management Program

Office hours over the Christmas/ New Year break

Our office will be closed between the 23rd of December 2022 and will reopen on the 3rd of January 2023. Adam Royle (0417 610 446) remains on call throughout the Christmas and New Year break to ensure we service your requirements. Some staff will be taking a well-earned break between early December and February, on their return they will attend to your enquires.

Courses on Offer to all Growers:

- ◆ Six Easy Steps
- ◆ Intergrated Weed Management
- ◆ Precision Agriculture
- ◆ Auschem (formerly Chemcert)

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Thanks

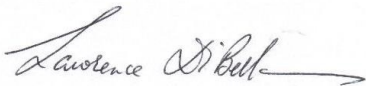
I would like to thank the Board and staff for the huge effort they put in this year. HCPSL has now become the principal sugarcane technical services group for the Herbert cane industry, providing multiple services to the local industry.

A special thanks to our project partner groups who deliver services or undertake research to advance the Herbert cane industry with HCPSL: SRA, the CRC Soils, the Great Barrier Reef Foundation James Cook University, University of Queensland, Griffith University, Cultivate Farms, Project Catalyst, Green Microbes, Queensland Government Department of Agriculture and Fisheries, Hinchinbrook Community Feral Pig Management Program partners and Tropwater National Landcare.

HCPSL would also like to thank the industry for its continued support in 2022 and look forward to servicing the industry once again in 2023.

If you have any concerns or suggestions on how we can service our members better please contact me on 47761808 (office), 0448084252 (mobile) or ldibella@hcpsl.com.au (email) or contact one of the company Board members.

Have a Merry Christmas and a Happy New Year.

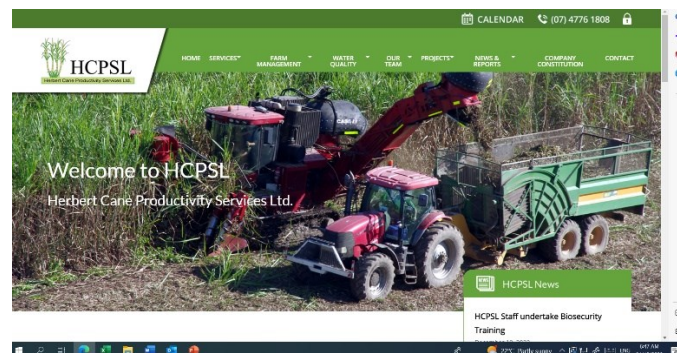


Lawrence Di Bella



HCPSL Company Manager.

Check out the HCPSL website- www.hcpsl.com



THE YEAR THAT WAS!



Above left: HCPSL inspecting tissue culture CD Nursey, Stone River
Above right: HCPSL with work experience student from ISHS
Below left: HCPSL staff soil testing infield
Below right: Wet Harvest



Drones Over the Farm

(Article by Rod Nielson)

Over the last few short years, drones have become smaller, smarter and easier to operate. DJI's most recent Mini 3 Pro provides some new opportunities for users, including farmers. Coming in at only 249 grams, the Mini 3 Pro falls into the "Micro" drone category. One of the really attractive points is that the Mini 3 Pro has collision avoidance like the larger drones, making it harder to crash into a tree (or anything else). For growers thinking of purchasing a drone to fly over their own farms, there are a few requirements which you will need to understand for the safe use of airspace, and to fly legally.

There are three categories of drones which are relevant when flying your own drone over your own land, without the need for a remote pilot's license (RePL). Note that RPA, or 'remotely piloted aircraft' is the official name for a drone.

| Category | Description |
|----------------|--|
| Micro RPA | 250g or less. |
| Very Small RPA | More than 250g but not more than 2Kg, gross take-off weight. |
| Small RPA | More than 2Kg but not more than 25Kg, gross take-off weight. |

Gross take-off weight includes the weight of the drone, batteries and payload, e.g. drone which carry a payload, including a camera. These might include a water testing kit, or a drone made to carry and spray agricultural chemicals, etc. In the case of agricultural chemicals, the legal permits for chemical usage and aerial application also need to be adhered to.



Micro drones like DJI's Mavic Mini 3 Pro (above) are relatively inexpensive compared to other drones and are small enough to carry around in a small bag on the passenger seat of the vehicle. The advertised 34 minute flight time is theoretical and is based on almost windless conditions and how far away you fly. One of the safety features lets the drone calculate how much battery it needs to return safely to its take-off point, and when that limit is reached, the drone will automatically return home, often with more than 15% of battery life in reserve. On the bright side, it's better than having to search through a cane block full of lodged cane to recover a drone. You should be able to count on 20 to 25 minutes of flight time before the drone itself takes control and returns to home automatically.

The ability to fly over a block of cane and look for weeds, particularly vines in the cane canopy is quite valuable. HCPSL flew over four blocks for a grower earlier this year to find that only one needed to be treated for weeds. Then there's the ability to see the roof of the house or shed without having to actually get up there, or to look for a blockage in a drain without being in waste deep with the crocs. There are plenty of uses for a small drone like the DJI Mavic Mini 3 Pro around the farm, remembering that there are guidelines for their safe use.

There's a lot of information provided in CASA's Micro and Excluded Category RPA plain English guide, particularly pages 8 to 12. Page 7 lists the 'standard operating conditions' (SOC) which provide the basics for safe flight.

So ... you've read this far and the drone sounds like a good thing to have. What do you need to do to use one and be compliant with CASA?

For a micro drone like the Mavic Mini 3 Pro:

1. Get a myCASA account. Go to the CASA website (<https://www.casa.gov.au/>), click on the link



MyCASA

and create an account. Then;

2. Get an ARN – aviation reference number (an individual ARN is enough to fly over your own farm to begin with). This is needed for any interaction with CASA, such as registering your drone and getting your operator's accreditation. There are proof of identity requirements e.g. 100 points (See link below). These include the usual suspects: passport, driver's license, Medicare card, etc. Certified copies of these can be sent as attachments to the ARN application online. Then:
3. Register your drone. Registration is currently free for drones in the micro category. HCPSL operates a DJI Mavic 2 Pro, which falls into the very small RPA category and costs \$40 annually to register. Then:
4. Get the Operator Accreditation. To get an Operator Accreditation you need:
 - to be 16 or older
 - myCASA account
 - a digital identity or proof of identity, such as an Australian passport, Australian birth or citizenship certificate, or ImmiCard
 - an individual aviation reference number (ARN)
 - an understanding of the standard operating conditions and the rules that apply to excluded category and micro RPA
 - to pass an online quiz
 - to download and/or print your PDF accreditation certificate or download your accreditation to either an Apple or Android device, using the Apple Wallet or Google Pay from myCASA.

Links to webpages are provided below.

<https://www.casa.gov.au/sites/default/files/2021-08/part-101-micro-excluded-rpa-operations-plain-english-guide.pdf>



Before You Fly

CASA recommends downloading and using a Drone Safety App (see webpage below) or visiting one online before you fly. This will provide information on where you can and cannot fly, and in some instances, what obstacle exist in or around you proposed flight area. HCPSL uses the online app, Ok2Fly.

CASA

<https://www.casa.gov.au/>

Operator Accreditation

<https://www.casa.gov.au/drones/get-your-operator-credentials/operator-accreditation>

Apply for an Individual ARN

<https://www.casa.gov.au/licences-and-certificates/aviation-reference-numbers/individual-aviation-reference-numbers#>

Making up 100 points of identification

<https://www.casa.gov.au/licences-and-certificates/aviation-reference-numbers/individual-aviation-reference-numbers#>

Certifying your documents

<https://www.casa.gov.au/licences-and-certificates/aviation-reference-numbers/certifying-your-identity-documents>

Drone Safety Apps

<https://www.casa.gov.au/knowyourdrone/drone-safety-apps>

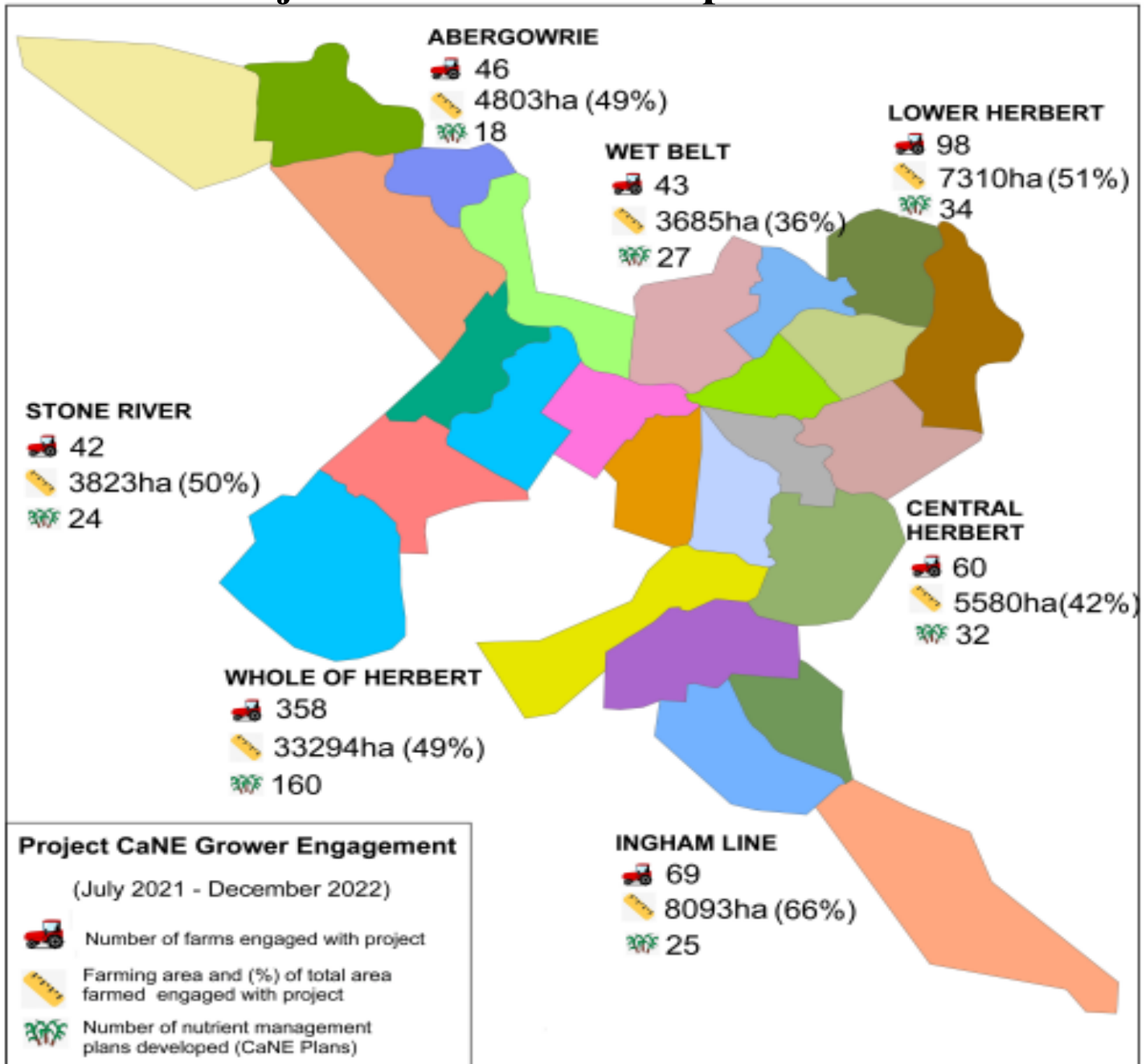
Ok2Fly

<https://ok2fly.com.au/>

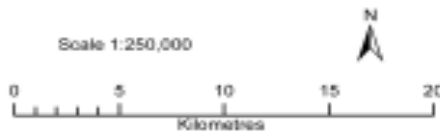
Standard Operating Conditions (SOC)

<https://www.futurelearn.com/info/courses/drone-safety/0/steps/171157>

Project CaNE area of impact this far



Project CaNE is funded by a partnership between the Australian Government's Reef Trust and the Great Barrier Reef Foundation.



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Interaction with our Youth Community

(Article by Rhiannan Harragon)

This year some of our HCPSL Staff went back to School! Staff showcased what types of jobs are available in the sugarcane industry and introduced the school children to tissue culture sugarcane.

4 to 5 tissue culture cane plants were provided to schools visited during the year. The school children planted the tissue culture cane at their schools, allowing them to nurture and love them. A new section at the 2023 Ingham Show Cane Display will be created for the schools to enter their fully grown tissue culture cane. The Tissue culture cane schools competition is a way to create interest in the industry and develop an understanding of the crops management.

HCPSL worked with students from Prep/Kindy through to Year 12. One of the highlights of the visit was being able to see how much our younger generation do know about the industry. Seeing them interested in the industry that is the backbone of our community was encouraging.

HCPSL attended the “Future in Hinchinbrook Day 2022” which allowed the company showcase what services it provides for the local industry. On the day HCPSL had a “Guess the Variety Competition”, showcased RSD and soil testing methods to school children who visited the display. Event organisers stated that the HCPSL display was one of the interactive and frequent visited displays on the day.

As an organization HCPSL encourages young people to seek jobs in the industry and learn more about the crop that they see everyday when going to and from school.

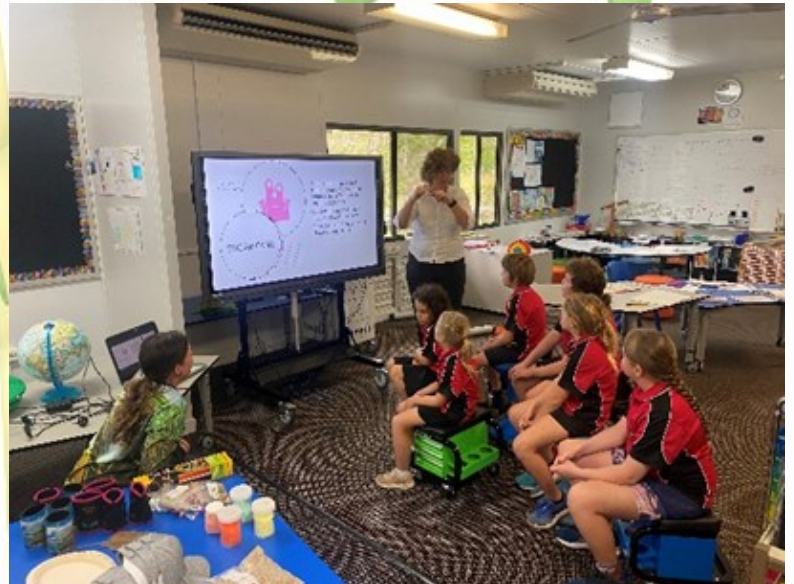
If you have a young person in your family who is interested in doing work experience with HCSL, please contact your school careers officer to arrange it.

For more information on the Tissue Culture cane school competition please: Rhiannan Harragon on 47761808.



Students at Gilroy Santa Maria College planting tissue culture cane for the 2023 Ingham Show competition

Students at Mt Fox School learning about the Sugarcane Industry



HCPSL Staff at the Future in Hinchinbrook Day 2022

JCU student -Ethan Waters

Working on an innovative way to detect RSD

Congratulations to Ethan Waters the winner of the 2022 Engineers Australia | Institute of Engineering Technology Student Seminar Competition QLD Finals for Software, Electrical & Electronic Engineering award. He received the award on Thursday evening of the 27th of October 2022 at JCU.

Ethan was the James Cook University representative, presenting his thesis on "**Sugarcane Health Monitoring and Ratoon Stunting Disease (RSD) Detection with Freely Available Multispectral Satellites**".

Ethan thanked Engineers Australia and the Institute of Engineering Technology for hosting the event. He also thanked his JCU supervisors, Mostafa Rahimi Azghadi and Carla Ewels, for their guidance and the team from HCPSL who assisted him with his studies.

Ethan will continue to work (as a JCU student) with HCPSL staff to progress the research he has undertaken into RSD detection.

Once again congratulations Ethan, your dedication and hard work has paid off.

Ethan presented his findings at the November HCPSL Board meeting.



Photo above- Ethan (in the middle) receiving his award.

The Glasshouse Experiment to assess methods to control RSD at planting

(Article by Lawrence Di Bella and Rhiannan Harragon)

It has been found that billet planters are an effective way of transmitting RSD through their dip systems.

HCPSL staff recently completed a glasshouse experiment at the HCPSL Macknade farm to assess different potential control agents to control RSD spread in the dip of planting equipment. The possible RSD control agents assessed were Sterimax® and a specific strain of *Bacillus subtilis* (a biological agent) at 2 different rates. HCPSL staff worked with Drs. Anthony Young- UQ and Chandra Iyer- Green Microbes for this experiment.

The trial is now complete, and the results will be written up as a research paper.

In summary the results found the following:

- Both Sterimax® and the specific strain of *Bacillus subtilis* did not effectively control RSD in the dips of a planter. It must be noted that the Sterimax® is still an effective chemical to treat equipment to control RSD.
- The best control measure to control RSD is to plant disease free material, which is sourced from tissue culture, HCPSL Approved Seed plots or cane that has been hot water treated.
- Sterilise all cutting, planting and harvesting equipment before use with Sterimax® or Cane Knife Steriliser® sterilising agents. Do not use these products in the planter dip because it may have a negative effect on crop development.



Photo above- Lawrence in the glasshouse with the plants used in the experiment.

Photo below- Rhiannan in the glasshouse processing RSD samples for RSD analysis at UQ-Gatton.



HCPSL Board members and Company Manager head south to investigate new technologies

(Article by Gino Zatta, Greg Erkkila and Lawrence Di Bella)

HCPSL Board members Gino Zatta and Greg Erkkila and HCPSL Company Manager Lawrence Di Bella visited research facilities, machinery manufacturers and to investigate new technologies and equipment that could be used by HCPSL and the Herbert cane industry in October 2022.



Photo right- Chickpeas grown near Dalby.

Photo top left- Cotton still to harvest

Photo bottom left- HCPSL Board members and staff at a grain's property outside of Dal-

The group ventured into cotton and grain country visiting HCPSL Extension Officer- Ellie McVeigh, who now resides near Dalby with her partner James Formosa. Ellie continues to work for HCPSL on Project CaNE, delivering nutrient management plans for Herbert growers and supporting other activities in which the company is undertaking.

Ellie and James are on the move again in January 2023, moving to Mackay.



Ellie McVeigh in front of cotton bales at the farm in which James Formosa is employed.

The group got to view firsthand Swarm Farm's robotic driverless spray units which operate on the cotton farm where James is employed. The group also got to review other grain and cotton technologies and operations during the visit.



Photo above (left to right) Ellie McVeigh, James Formosa, Greg Erkkila and Gino Zatta in front of a Swarm Farm spray unit, near Dalby.

On the way to Dalby and Toowoomba the group visited the Metagen labs and process facilities in Gatton. At this site the HCPSL team met with Dr Anthony Young (University of Queensland lecturer and scientist) and Shane Fitzgerald (owner/ Director of Metagen) and his team to review the LSB RSD testing lab and general company operations.



Photo above (left to right) Shane Fitzgerald, Lawrence Di Bella, Greg Erkkila, Dr. Anthony Young, Gino Zatta and Dr. Neil Wilson at Metagen, Gatton.

The HCPSL team also visited Gessner in Toowoomba to investigate small billet planters that could possibly be used to plant HCPSL approved seed plots into the future. At this stage HCPSL is still considering what machinery options it may use to plant its Approved Seed plots into the future given labour shortages and the requirement to plant hot water treated cane.

Photo below Gino Zatta and Lawrence Di Bella in front of a large ripper used by the Western Australia grains industry at the Gessner factory in Toowoomba.



Photo above - Tissue culture cane grown at SRA Indooroopilly ready for shipment to regional propagation sites.

When back in Brisbane, the HCPSL team visited Drs. Clair Bolton and Chuong Ngo at SRA Indooroopilly to view firsthand the SRA RSD and tissue culture labs. The tissue culture propagation process was a real eye opener for both Greg and Gino. From one sugarcane meristem many tissue culture plants can be generated for industry use. HCPSL obtains annually tissue culture plants from SRA for Herbert growers to propagate on their own farms.

The final visit for the team was to meet with Dr. Weijin Wang (Queensland government soil scientist) at Queensland government's Ecoscience Precinct in Brisbane. The team discussed opportunities to work together in the future and visit the largest soil and water laboratory in the southern hemisphere. HCPSL has had a long working relationship with Dr. Weijin Wang, working jointly on projects to better understand nitrogen loss pathways, cover crops and enhanced efficiency fertilisers. Dr Wang's team does the research, with HCPSL Extension Agronomy staff taking the research and making practical outcomes on the ground for local farmers.

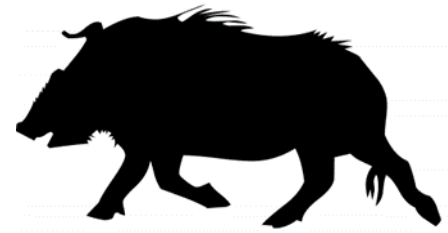
The 3-day trip was informative, thought provoking and will greatly assist HCPSL drive its operations and the local industry forward into the future.



Photo above (left to right)- Gino Zatta, James Formosa, Greg Erkkila and Ellie McVeigh inspecting a cotton crop near Dalby.

ACTION ON FERAL PIGS

(Article written by the Hinchinbrook Community Feral Pig Management Program)



HCPSL has been very active with other partners of the Hinchinbrook Community Feral Pig Management Program (HCFPMP) in the past 12 months, with over 1200 feral pigs taken out across the Shire.

The HCFPMP has undertaken 2 aerial shoots along the coastline in remote areas to manage feral pigs. Below is a photograph of a dead feral pig shot during the 24/25 November 2022 shoot. These shoots have been very successful with over 150 pigs shot. The program continues to use 1080 baiting and trapping methods as the main control methodologies with good success. The largest challenge is pig chasers disrupting pre-feeding, baiting and trapping activities.



Photo above: A solitude boar shot in the salt plains southeast of Ingham.

If you wish to be involved in the Hinchinbrook Community Feral Pig Management Program (HCFPMP) please contact:

David Bacchiella (Hinchinbrook Shire Council Feral Pig Management Officer)- 0458 764 660

Matt Buckman (Hinchinbrook Shire Council Biosecurity Officer)- 0439 005 471

Project Squealer Project report



“Project Squealer” commenced in 2022 with project partners: HCPSL, Hinchinbrook Shire Council, National Parks and technology companies, working together to assess novel approaches to manage feral pigs in remote locations. The project was funded by the Queensland Government Feral Pig Initiative Program (Round 6)



Photo 1. Project Squealer Steering Committee- (left to right) Ray Stallan- HCPSL Feral Pig Officer, Matt Buckman- Hinchinbrook Shire Council Officer, Alex Tessieri- Queensland National Parks Officer, Michael Nash- Hinchinbrook Shire Council Officer, Lawrence Di Bella- HCPSL Company Manager, Rod Nielson- HCPSL GIS Officer and precision agriculture specialist.

The project will be investigating novel and new technologies like:

- New trap designs.
- Artificial Intelligence (AI) technology to detect feral pigs entering traps.
- The use of radio tracking collars fitted to a “Judas” pig which will be released back into the wild to understand feral pig habitats and range over the wet season to allow for aerial shooting to target feral pig populations.
- The use of drone technologies to track, locate and to determine population numbers.
- Thermal imagery cameras to detect feral pigs in densely vegetated areas.
- The use of drone technology to deploy 1080 baits into remote areas, as a proof of concept.

To date the project as investigated the following:

The use of Thermal Imagery

It was proposed to evaluate the viability of undertaking a population count using a drone-mounted thermal camera. The original intent was to undertake pig counts before and after one of the aerial shooting activities to assess whether there had been a significant reduction in pig numbers.

A demonstration of a DJI Matrice 300 RTK and a H20T thermal camera was made in February and June 2022 to assess the effectiveness of the technology.

While this proved effective and showed up several pigs, the summer evening temperatures proved to be a drawback to this method being used at that time of the year. The project team thought that it would be better to use this method in winter, in the early hours of the morning when the differential between the ambient atmospheric temperature and mammals would be at its greatest.



Photo 2. Hinchinbrook Community Feral Pig Management Program stakeholder groups observing live drone footage data in field.



Photo 3 (above): DJI Matrice 300 RTK drone with H20T camera system used in the trial.

Image 1 below is a thermal image of a heat signature of a pig in a small gap in the sugar cane from ~40m above the ground level.

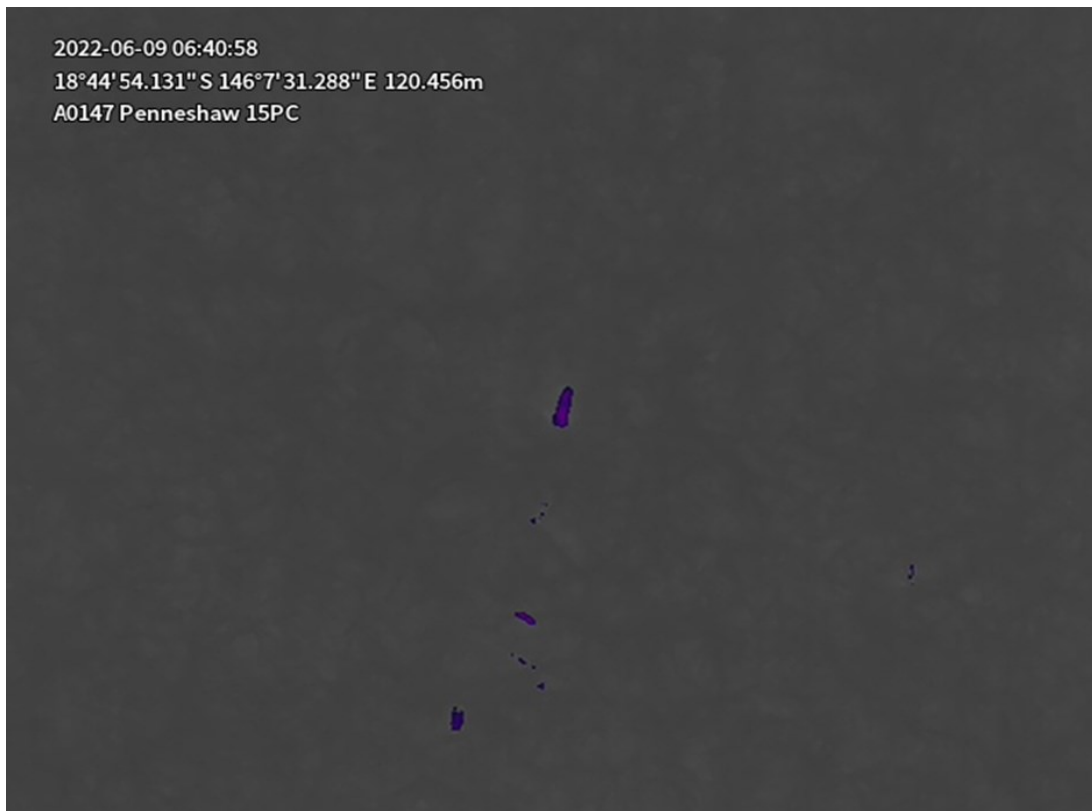


Image 2 above is the same field with the same pig in the small gap in the sugar cane shown in Image 1.

The use of radio tracking collars

The project partners have secured a permit to fit radio tracking collars to the “Judas” pigs to be used by the project. 3 collars have been purchased by the project and now wait for delivery from Canada. Considerable time was required to meet animal ethics requirements and consultation with relevant departments. As a part of the requirements to fit radio tracking collars a DAF vet has been appointed to the project to assist with administering anesthetics to the feral pig to enable the pigs to be fitted with the collars. It is anticipated that the collars will be fitted when they arrive in mid-January.

The radio tracking collars will be used to identify harborage areas of feral pigs in conjunction with drone and helicopter technology to track and eliminate whole populations of feral pigs.

The use of drone technology to dispense feral pig baits

Currently 1080 in tropical baits (mangoes and bananas) is not permitted by law to be dispensed by air. The team is working with a private company to develop a prototype feral pig bait dispenser for a drone. The device will be tested in 2023 as a proof of concept with pre-feed baits.

The use of smart traps and a AI technology

The project has purchased 2 new traps to be assessed as part of the project. The trap is fitted with smart gate technologies, which will allow the feral pigs to continuously enter the trap and not exit.

The project team have also engaged researchers at JCU to develop AI technology to identify feral pigs from other animal species. It is proposed that this technology will be fitted to traps to prevent off target impacts (like cassowary and emu) and trigger when whole populations enter the trap.

Photo below: Feral pigs consuming 1080 treated bananas in the Lannercost Area.



Project funded by:



Fallow Cropping – Gaining the most from your unused land

(Article by Megan Zamhel—Project Catalyst)

It's that time of year again when sugarcane growers of the Herbert district will start to think about their upcoming fallow practices. Project Catalyst has been collaborating with growers since 2016 to better utilise their fallow land by growing mixed fallow crops for soil health and sustainable productivity, but could we turn this unused land into another profit and still gain soil health benefits?? With careful management, yes.

Yield decline has been an issue in the Australian sugarcane industry for more than half a century and has been clearly associated with soil degradation caused by the long-term monoculture of sugarcane. Yield decline has been defined as "*The loss of productive capacity of sugarcane growing soils under long-term monoculture*" (Garside et al., 1997a). With this in mind, then why not utilise the benefits from breaking the cane monoculture with a different crop species and gain a profit if the market suits the design.

This year with the help of Department Agricultural Fishery (DAF) agribusiness development officer Brock Dembowski, a few growers tried their hand at growing soybeans as a cash crop during the previous 2021 fallow season to diversify their businesses income. Such a practice if successful could help diversify the districts income sources. This gives growers several benefits such as breaking the sugarcane monoculture, gaining soil health benefits, securing another source of income while maintaining their usual business of growing sugarcane, controlling problem weeds in sugarcane and making the most of land that would usually be unprofitable for a period.

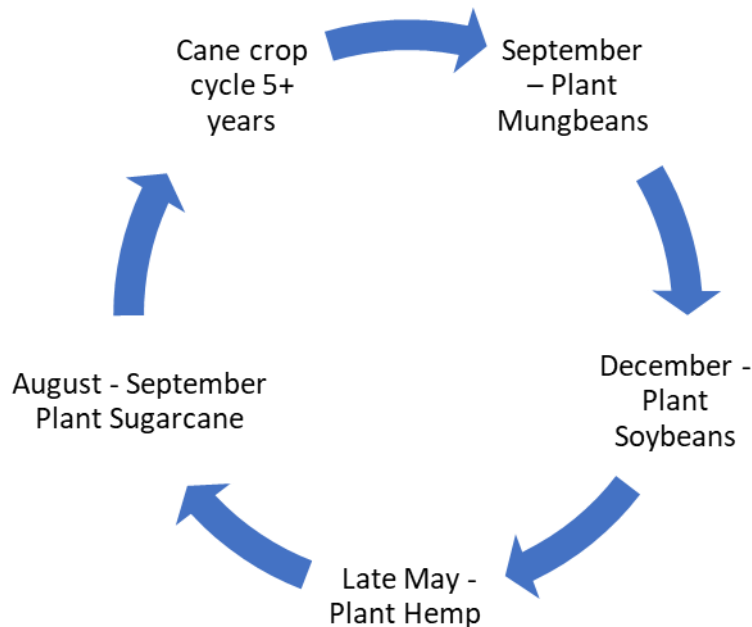
Several growers from different areas around the district were involved and eager to evaluate the potential profits to be gained from harvesting soybeans in commercial quantities. Unfortunately, a late start to the wet season with an extreme heat wave during March meant that nearly all the crops were unable to be harvested. Though one of the advantages with this practice is that the growers were still able to gain soil health benefits by simply using the crop for nitrogen and carbon inputs for the subsequent cane crop enabling them to lower chemical fertiliser inputs instead. From an economics standpoint, the extreme price of fertiliser meant that a 2T/ha soybean crop was worth just as much as a nitrogen source.

The Herbert wasn't alone, nearly all of the grain crops along the east coast were wiped out with wet weather events at harvest which has now driven up grain prices for the coming year. Even though it was unsuccessful at harvest the idea has stuck and growers were not discouraged by the failure and some have decided to plant again this summer. Growers have used their initiative and knowledge to adjust and try again during the early winter fallow period. Such crops like industrial hemp and mung beans are short life crops and can be harvested within 90-120 days from sowing. This works for growers who plant later in the season as they have time to fit in a cash crop before planting cane. As one grower stated, "I like to go on a holiday during the off season, this suits me as I am working on the farm this time of year anyway."

This season in early June 2022 (a little later than originally planned due to weather) the first industrial hemp crop for the district was planted in the Bambaroo area. Industrial hemp can be grown for two distinct products, either fibre or seed. This particular crop was grown for seed during the winter season as there is no local market for fibre at this stage. Industrial hemp can also be grown for the fibre market during the summer fallow period but without the require infrastructure locally it is an expensive product to freight. The crop likes terrace loam/alluvial, well drained soils and is ready to harvest in 120 days if grown for seed.

As with any new idea that's gaining momentum, this too came with challenges and learning experiences, but the industrial hemp crop was harvested successfully, and the grower is interested to have another go at growing the crop next season.

The grower would ideally like to rotate his fallow blocks using cash crops within his sugarcane enterprise. Example: Mung beans – planted in September followed by soybeans fallow crop through summer, mung beans in autumn, hemp crop early winter, and then back into sugarcane to plant come August—September.



Most growers fallow between 10-15% of their growing area. Utilising this fallow area by growing a short life cash rotational crop can be another source of income. This has multiple benefits for the subsequent cane crop, especially if a fallow crop of a leguminous species has been grown, as this encourages a more diverse microbial system in the soil profile. A diverse microbial system helps drive the nutrient cycling process which in turn benefits the cane crop production.

Other rotational crops that are being grown in the districts are maize, sweet potatoes, pumpkins, and watermelons.

This practice will obviously not be suited to everyone, and many factors will need to be thought about and managed well to have successful outcomes. Specific equipment and storage facilities would need to be considered and valuable insight can be gained through discussions with growers who have been involved with rotational cropping previously.

The rotational cash cropping system within the cane enterprise can provide break the monoculture and give the farmer to have the opportunity to make an additional income from a block of land.

HCPSL is currently working alongside DAF to train staff with some basic agronomy skills to be able to help growers interested in trying out these crops whether it be for harvest or for soil health benefits. Contact Brock Dembowski from DAF if you would like to discuss further 0467819592

Funding agencies:



Project Catalyst is funded by the partnership between the Australian Government's Reef Trust and the Great Barrier Reef Foundation.



Hayden Di Bella with his crop of sweet potato grown in rotation with cane, near Ingham



Soybean crops grown in the Abergowrie area in 2022



The Herbert's first industrial Hemp grown at Bambaroo, 2022



Min till cover crop



Planting Industrial hemp crop in the Bambaroo area in 2022

Combined Productivity Services Conference 2022 - Lucinda/ Macknade

In early December 2022, the Combined Productivity Services conference was held with almost 70 attending the event, with participants from all Queensland Productivity Services groups attending (except Rocky Point). HCPSL and Burdekin Productivity Services hosted the biannual event.

The following topics were covered during the event:

- Biosecurity measures
- RSD management
- New variety development
- Approved clean seed cane
- Tissue culture cane
- Hot water treatment
- Feral pig management
- Crop nutrition
- Soil health
- Herbicide management
- Activities undertaken by all Productivity Services groups.



Photo above- Dr. Rob Magarey SRA Pathologist presenting at the conference

Some interesting facts about HCPSL when comparing Productivity Services Groups:

- HCPSL is the second largest provider of Approved Seed cane to growers in the industry with over 4335.75t, after the Burdekin in 2022.
- HCPSL treats more cane through its hot water treatment plant annually.
- HCPSL is the largest provider of tissue culture plants (19,250 plants) to growers in 2022.
- HCPSL is one of the largest providers of RSD testing through either qPCR, PCM and LSB methods.
- HCPSL and its associated local partners euthanise the greatest number of feral pigs of all Productivity Services groups.

Most HCPSL staff and HCPSL Board members- Michael Waring, Peter Larsen, Gino Zatta and Greg Erkkila attended events during the 3-day conference. Feedback from the conference was very positive. The key learnings from the event will now be implemented into the HCPSL business operations.



Photo above: Rhiannan Harragon (HCPSL Field Agronomist) presenting information on tissue culture cane at the conference.





Above photo- Rob Milla (BPS Company Manager) introducing Dr. Mehran Rezaei Rashti (Griffith University and Soil CRC).

Below photo- Conference group photo taken at the HCPSSL Macknade farm.



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WISHING YOU GOOD HEALTH,
HAPPINESS, AND SUCCESS IN THE
COMING YEAR AND ALWAYS.
HAPPY NEW YEAR!