

# Hart Beat

Hart Field-Site Group Inc www.hartfieldsite.org.au

June 2013 Issue 22

#### FROM THE CHAIRMAN:

Welcome to the first edition of HART BEAT for 2013. After a dry summer with minimal soil moisture entering the growing season, we were definitely sowing in good faith of timely rains. Since then it has certainly delivered after a solid, if somewhat patchy May, followed by an exceptionally wet June. I hope that seeding went smoothly and you are getting good practice at measuring the rain!!

On the Hart committee front, I have replaced Matt Dare as chairman following the completion of his 3 year term. Matt did a great job and I, along with our vibrant board members, thank him for his efforts. Matt will remain on the Hart board as vice chairman to assist me throughout this year.

We have also welcomed Sarah Noack to our team in the past 3 months as our research & extension manager. Sarah has taken over from Peter Hooper who performed the role since 2005. Peter has agreed to mentor Sarah in this role in the initial phase to allow a seamless transition. Thanks to Peter for all his efforts, it has contributed greatly to the success of the Hart Field-Site Group. Sarah has hit the ground running during the busy trial seeding program whilst also finishing her PhD on "Residue chemistry effects on phosphorus cycling and release in cropping soils". I invite you all to make yourself known to Sarah at one of our upcoming field days.

HART BEAT is taking on a new look in 2013, thanks to new funding support from a community landcare grant. The newsletter will now be available to anyone who would like to receive it and with time will include even more locations. The water, nitrogen and grain yield estimates are made from calculated predictions so as always, they need to be considered along with other guides and gut feel!

Lastly, our Winter Walk on the Tuesday, 23rd of July at 9am is fast approaching and if the rains continue, rubber boots will be the dress code. Hope to see you there.

Justin Wundke HART CHAIRMAN

## HART WINTER WALK

Tuesday 23<sup>rd</sup> July 2013 9am @ the Hart site

- Pathogen spore release & climatic triggers
  - Barley time of sowing by depth
  - Yield prophet and soil nitrogen
  - Controlling clethodim resistant annual rye grass in canola
    - more to be confirmed...

Morning tea provided

**FREE EVENT** – no RSVP required, though please get in touch if you're bringing a group



*Phil* (driving) and Stuart tripping trials at Hart, both from SARDI. June 2013.

## Hart (sandy clay loam)

#### The season so far

Annual rain to date: 242mm GSR to date: 190mm GSR decile: 9.0 Current predicted PAW: 134mm Crop growth

Variety: Mace Sowing date: 1<sup>st</sup> May Nitrogen fertiliser: 30kgN/ha

#### Grain & hay yield predictions

Yield prophet estimate: (Date of report 24/06/2013)

These estimates are based on a 50% probability

Yield t/ha	Sown 1 <sup>st</sup> May (see graph)	Change since last report	Sown 20 <sup>th</sup> May	This time last year
Grain	4.6	0	4.2	3.5

#### French & Schultz grain yield estimate:

100% WUE: 5.4t/ha, 80% WUE: 4.3/ha

This model assumes that there is 0mm stored moisture, 110mm of evaporation and decile 5 (190mm) rainfall for the rest of the season.

## Pinery (silty clay loam)

The season so far Annual rain to date: 197mm GSR to date: 170mm GSR decile: 9.0 Current predicted PAW: 72mm Crop growth Variety: Mace Sowing date: 1<sup>st</sup> May Nitrogen fertiliser: 30kgN/ha

#### Grain & hay yield predictions

Yield prophet estimate: (Date of report 24/06/2013) These estimates are based on a 50% probability

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Yield t/ha	Sown 1 <sup>st</sup> May (see graph)	Change from last report	Sown 20 <sup>h</sup> May	This time last year
Grain	3.8	0	3.0	Not Avail

#### French & Schultz grain yield estimate:

100% WUE: 4.5/ha, 80% WUE: 3.6/ha

This model assumes that there is 0mm stored moisture, 110mm of evaporation and decile 5 (166mm) rainfall for the rest of the season.

### Kybunga (clay loam) The season so far

Annual rain to date: 189mm GSR to date: 157mm GSR decile: 7.0 Current predicted PAW: 66mm Crop growth

Variety: Mace Sowing date: 1st May Nitrogen fertiliser: 30kgN/ha

#### Grain & hay yield predictions

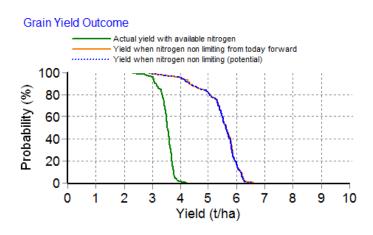
Yield prophet estimate: (Date of report 24/06/13) These estimates are based on a 50% probability

Yield t/ha	Sown 1 <sup>st</sup> May (see graph)	Change from last report	Sown 20 <sup>th</sup> May	This time last year
Grain	4.3	0	3.8	5.4

#### French & Schultz grain yield estimate:

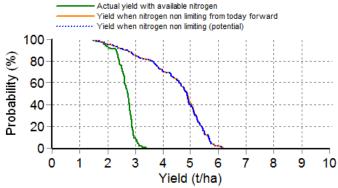
100% WUE: 5.6t/ha, 80% WUE: 4.5/ha

This model assumes that there is 0 mm stored moisture, 110mm of evaporation and decile 5 (232mm) rainfall for the rest of the season.

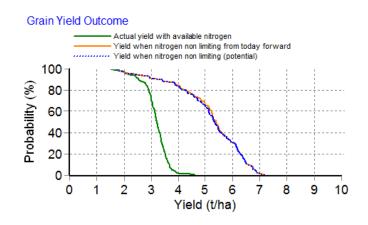


This graph shows the chance of reaching the corresponding yield given weather, soil conditions and agronomic inputs to date, and historical climate data (100yrs) to simulate remainder of the season.





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## Spalding (red brown earth)

The season so far

Annual rain to date: 211mm GSR to date: 171mm GSR decile: 8.0 Current predicted PAW: 103mm Crop growth Variety: Mace Sowing date: 1<sup>st</sup> May Nitrogen fertiliser: 30kgN/ha

#### Grain & hay yield predictions

Yield prophet estimate: (Date of report 24/6/2013)

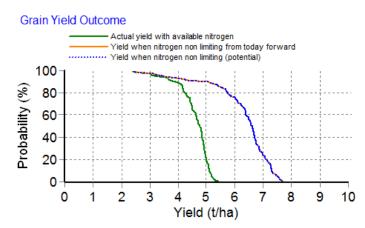
These estimates are based on a 50% probability

Yield t/ha	Sown 1 <sup>st</sup> May (see graph)	Change from last report	Sown 20 <sup>th</sup> May	This time last year
Grain	5.6	0	5.0	4.3

#### French & Schultz grain yield estimate:

100% WUE: 5.2t/ha, 80% WUE: 4.2/ha

This model assumes that there is 0mm stored moisture, 110mm of evaporation and decile 5 (199mm) rainfall for the rest of the season.



This graph shows the chance of reaching the corresponding yield given weather, soil conditions and agronomic inputs to date, and historical climate data (100yrs) to simulate remainder of the season.

# Farrell Flat (red clay loam)

#### The season so far

Annual rain to date: 168mm GSR to date: 133mm GSR decile: 5.0 Current predicted PAW: 62mm Crop growth Variety: Mace Sowing date: 1<sup>th</sup> May Nitrogen fertiliser: 30kgN/ha

#### Grain & hay yield predictions

Yield prophet estimate: (Date of report 24/6/2013) These estimates are based on a 50% probability

Yield t/ha	Sown 1 <sup>st</sup> May (see graph)	Change from last report	Sown 20 <sup>th</sup> May	This time last year
Grain	5.7	0	5.0	5.0

#### French & Schultz grain yield estimate:

100% WUE: 5.1t/ha, 80% WUE: 4.0/ha

This model assumes that there is 0mm stored moisture, 110mm of evaporation and decile 5 (230mm) rainfall for the rest of the season.

## Tarlee (clay loam)

#### The season so far

Annual rain to date: 197mm GSR to date: 163mm GSR decile: 8.0 Current predicted PAW: 61mm

#### **Crop growth**

Variety: Mace Sowing date: 1<sup>st</sup> May Nitrogen fertiliser: 30kgN/ha

#### Grain & hay yield predictions

Yield prophet estimate: (Date of report 24/6/13) These estimates are based on a 50% probability

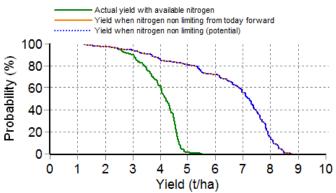
Yield t/ha	Sown 1 <sup>st</sup> May (see graph)	Change from last report	Sown 20 <sup>th</sup> May	This time last year
Grain	4.9	0	4.8	6.5

#### French & Schultz grain yield estimate:

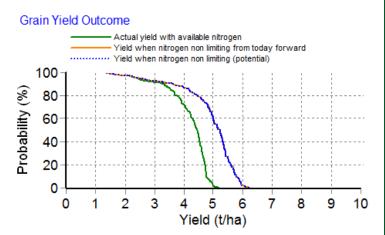
100% WUE: 5.6t/ha, 80% WUE: 4.5/ha

This model assumes that there is 0mm stored moisture, 110mm of evaporation and decile 5 (225mm) rainfall for the rest of the season.

#### Grain Yield Outcome



This graph shows the chance of reaching the corresponding yield given weather, soil conditions and agronomic inputs to date, and historical climate data (100yrs) to simulate remainder of the season.



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# **Hart Beat**

## SEEDING AT HART IN 2013





Canola trials at Hart taken Tuesday 25<sup>th</sup> June



Tom Robinson (disc seeder) and Justin Wundke (no-till) seeding the long-term cropping systems trial at Hart.

### HART FIELD-SITE GROUP INC - Contact information

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