

## CottonMap Annual Report 2014-15

### Summary

- Over 2,416,000 hectares of cotton have been cumulatively mapped since 2009 (Table 1).
- 212 users mapped 214,553 hectares over 2287 fields for the 2014-15 season (Table 1).
- 2014-15 was the first season where the area mapped on CottonMap equated to 100% of the planted hectares for the season (Table 1).
- Approximately 215,000 hectares were planted in 2014-15 (including 5% refuge), which is down significantly from the 2013-2014 season (Table 1).

Season	No. Users	No. Fields Mapped	Area Mapped	Planted hectares*	% Area mapped
2009-10	214	2,017	173,644	182,000	95.4
2010-11	408	5,326	579,990	607,780	95.4
2011-12	368	5,381	640,394	655,064	97.8
2012-13	214	3,706	383,826	425,786	90.1
2013-14	207	3,707	420,237	423,000	99.3
2014-15	212	2,287	214,553	215,000	101.5

Table 1 Summarised usage data for CottonMap between the 2009-10 and 2014-15 seasons. \*Planted hectare estimate includes 5% refuge.

### Total number of users

- 212 users were registered for CottonMap in 2014-15 ( Table 1).
- The total number of users has been consistent for the last 3 season ( Table 1).
- For the 2014-15 season, 2330 fields were mapped, equating to 10.8 fields mapped per user (Figure 1). This may indicate that a number of consultants/TSPs may be mapping on behalf of growers.

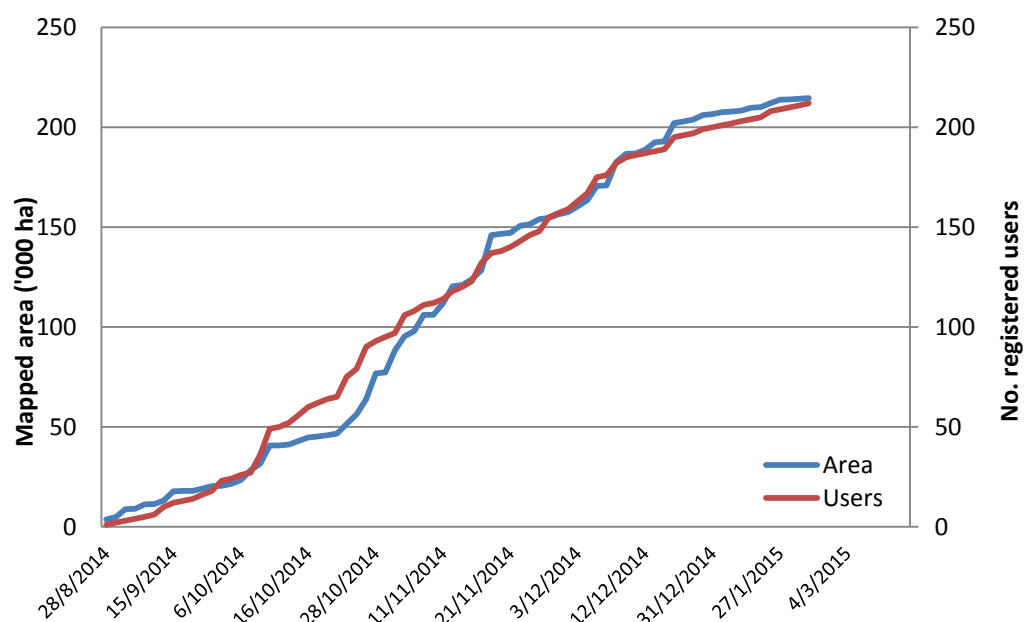


Figure 1 Number of users and area mapped (hectares) for CottonMap during the 2014-15 season

## Area mapped (as a % of total area)

- 2014-15 was the first season where the area mapped on CottonMap equated to 100% of the planted hectares for the season (Table 1). This follows an encouraging general trend of increasing % area mapped from 95% in 2009-10 (Table 1). However a figure of >100% mapped indicates a need to increase accuracy of the program. As such, Cotton Australia has run extension exercises targeting consultants/TSPs with the aim of reducing potential inaccuracies associated with mapping whole farms, infrastructure and non-cotton crops.
- The rate at which fields were mapped to CottonMap was slightly faster for 2014-15 and 2013-14 compared with the previous 4 seasons (Figure 2). Further encouragement of early season mapping may increase the effectiveness of the CottonMap campaign.
- By the 30<sup>th</sup> November 2014, 69% of area was mapped which is slightly lower compared with the 3 previous season (Figure 3).
- Uptake of early season mapping was consistent with the previous 4 seasons, with dates for 25, 50 and 75% occurring within a 3 week period (Table 2).
- Late season mapping was slightly delayed for the 2014-15 season, with 90 and 99% of fields being mapped 1 to 2 weeks later compared with the previous 5 seasons (Table 2).

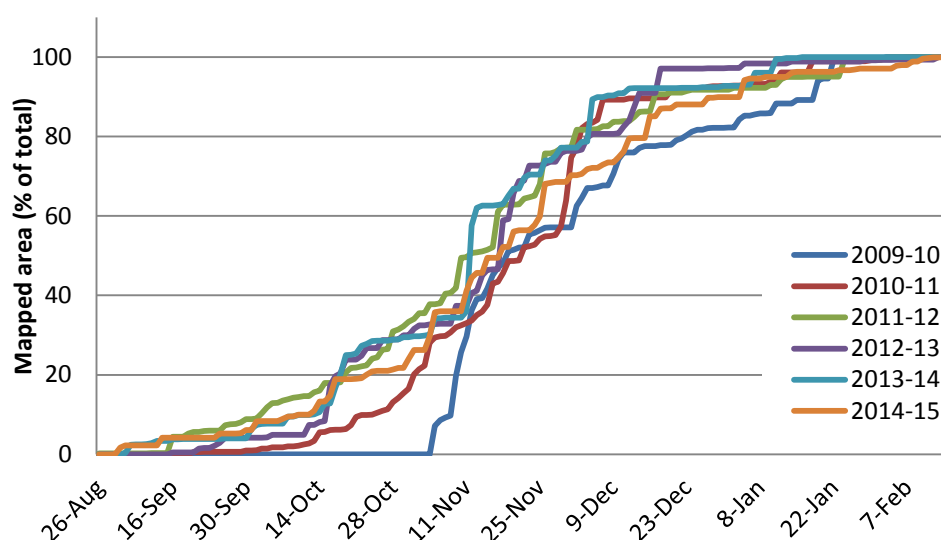


Figure 2 Area mapped using CottonMap for consecutive seasons between 2009-10 and 2014-15

Table 2 Dates by which the area on CottonMap represented 50, 90 or 99% of the total end-of-season mapped area

	25%	50%	75%	90%	99%
2009-10	10-Nov	19-Nov	11-Dec	19-Jan	22-Jan
2010-11	4-Nov	22-Nov	2-Dec	20-Dec	30-Jan
2011-12	26-Oct	12-Nov	26-Nov	17-Dec	24-Jan
2012-13	23-Oct	18-Nov	29-Nov	14-Dec	29-Jan
2013-14	20-Oct	12-Nov	28-Nov	8-Dec	11-Jan
2014-15	1-Nov	18-Nov	11-Dec	5-Jan	12-Feb

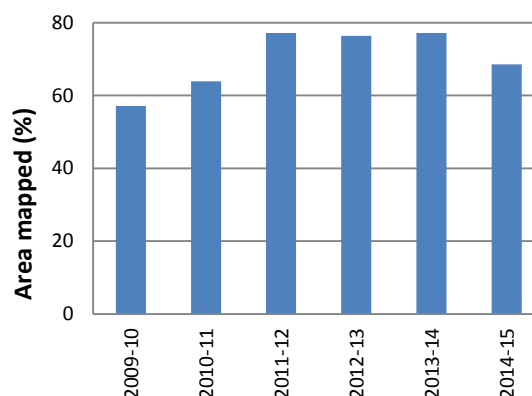


Figure 3 Area mapped by the 30<sup>th</sup> Nov (as % of total)

## Spray drift incidence

- Cotton Australia was notified of approximately 4000 ha cotton affected by phenoxy spray drift which equated to approximately 1.9% of planted cotton area (Table 3). The area damaged (%) was relatively high for the 2014-15 season compared with the previous 6 seasons (Table 3).
- The most damage occurred in NSW (3,561 ha) compared with QLD (395 ha).
- The majority of damage occurred within a single incident in late January, whereby 3,000 ha were affected near Bellata. This incident followed an isolated rainfall event around Edgeroi/Bellata around Christmas, with subsequent weed germination & growth coinciding with hot daytime temperatures in mid-late January. Contrary to label specifications, phenoxy-group chemicals were sprayed in the evening when temperatures had cooled. The result was indirect drift damage, associated with formation of an inversion layer. Fortunately the majority of these crops had sufficient recovery time resulting in only moderate yield penalties.
- The majority of reported crop damage was of medium to high severity (Figure 4). This may indicate that growers were less likely to report drift incidences where impact was low.
- There were no reported instances of total crop failure due to spray drift damage (Figure 4).

Table 3 Area damaged as a proportion of total planted hectares between the 2008 and 2014 cotton seasons

Season	Area damaged (ha)	Area damaged (%)
2008-09	15,910	10.6
2009-10	1,740	0.98
2010-11	0	-
2011-12	12,144	0.83
2012-13	12,214	2.7
2013-14	780	0.2
2014-15	3,956	1.93

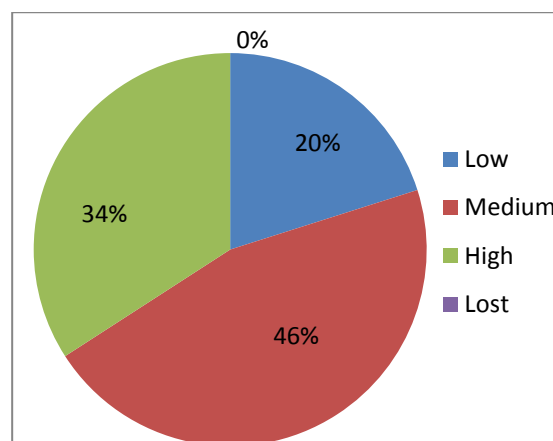


Figure 4 Proportion of reported spray drift incidences for 2014-15 where severity of damage was low, medium or high.

## CottonMap Annual Report 2013-14

### Summary

- 207 registered users mapped 420,237 hectares for the 2013-14 season (Table 1).
- Over 99% of the planted area was mapped to CottonMap (Table 1).
- The Cotton Australia estimate is 423,000 hectares planted, which is similar to the previous (2012-13) season (Table 1).
- Almost 18 fields were mapped per user, indicating that a number of consultants/TSPs may be mapping on behalf of growers (Table 1).
- Early season mapping was rapid compared with previous seasons, with 25% of all fields mapped by the 20<sup>th</sup> October (Table 2).
- Late season mapping was faster compared with previous seasons, with 90% of fields being mapped by the 8<sup>th</sup> December, almost a week before any previous season (Table 2).

### Spray drift incidence

- Cotton Australia was notified of approximately 780 ha cotton affected by phenoxy spray drift which equated to approximately 0.2% of planted cotton area. The area damaged (%) was the lowest on record (Table 3).
- The most damage occurred in NSW (660 ha) compared with QLD (120 ha).
- The majority of reported crop damage was of low to medium severity (Figure 5).
- There were no reported instances of total crop failure due to spray drift damage (Figure 5).

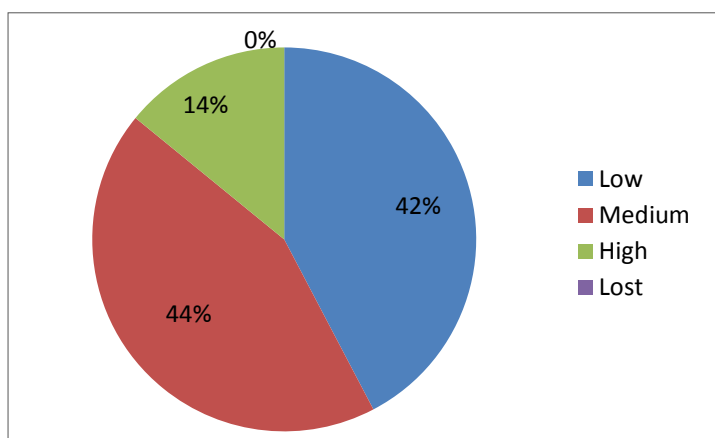


Figure 5 Proportion of reported spray drift incidences for 2013-14 where severity of damage was low, medium or high.