



# Land Management Practices Survey 2008-09

LMPS

In correspondence, please quote this number ▼

Please correct any errors on the label

### Purpose of Collection

This survey will collect information on the land management practices adopted by farmers in the Great Barrier Reef catchments. The data will be used by the Australian Government to determine changes in agricultural land management practices over time.

### Collection Authority

The information asked for is collected under the authority of the *Census and Statistics Act 1905*. Your co-operation is sought in completing and returning this form by the due date. The Act provides me with the power, if needed, to direct you to provide the information sought.

### Confidentiality

Your completed form remains confidential to the Australian Bureau of Statistics (ABS). Statistics will only be published in the form of aggregated data.

### Due Date

Please complete this form and return it in the reply paid envelope to the Australian Bureau of Statistics by **or within 14 days of receipt.**

Brian Pink  
Australian Statistician

**SAMPLE ONLY**



### Help available

Telephone: **1800 606 393**  
Freecall (excluding mobile phones)  
Facsimile: **1300 303 813**  
Write to: Australian Bureau of Statistics  
Reply Paid 76746  
Sydney NSW 2000

Person we should contact if any queries arise regarding this form

First Name	<input type="text"/>	Telephone Number	<input type="text"/>
Last Name	<input type="text"/>	Mobile Number	<input type="text"/>
Signature	<input type="text"/>	Facsimile Number	<input type="text"/>
		Date	<input type="text"/>

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### Please read this first

- **Important:** This form will be read using electronic equipment.
- Use **only black ball point pen** when completing this form.
- Please report area figures in whole numbers except where instructed otherwise, for example

.  or   .

- Keep each number, letter or tick within the data entry boxes provided, for example

or

- Do not use 'nil', 'n/a' or draw a line in the data entry boxes.
- Leave answer boxes blank where you have no response or data to enter.

- You will need to report an estimate of time taken when you have completed this form.
- If a mistake is made, cross out the incorrect answer and either write the answer in the remaining boxes, for example

,  .

or if not enough space is left, write next to the relevant item, for example

5 4 2   .

- If exact figures are not available, please provide careful estimates.
- The items listed under **Including** and **Excluding** are examples and should not be taken as a complete list of items to be included or excluded.

### Part A – The holding

**Including**

- Any of your land used by sharefarmers

**Excluding**

- Other people's land on which you sharefarm
- Any land under a Stock Grazing Permit and/or other short term lease or licence issued over the QPWS estate (e.g. State Forests, Conservation Parks)

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1(a) Does the holding (as shown on page 2) represent the total area of land operated or managed by you in the catchment (also shown on page 2) as at 30 June 2009?

*Note*

- Answer No if you leased part of this holding to others.
- Answer No if you leased any additional land from others (including crown land).

No  Go to Question 1(b)

Yes  Go to Question 2

(b) Record the area of the holding as shown on page 2 ... ..

**Minus**

(c) The area of land in the catchment leased to others ... ..

(d) The area of land in the catchment sold to others ... ..

**Plus**

(e) Any additional freehold land owned by you in the catchment ... ..

(f) Any additional land leased by you in the catchment (excl. Stock Grazing Permits and any other short term lease or licence issued over the QPWS estate)

**Equals**

(g) The total area of land operated or managed by you in the catchment ...

Hectares

,  .

,  .

,  .

,  .

,  .

Hectares

,  .

**2 Please provide a breakdown of the total area of the holding according to the main use of the land between 1 July 2008 and 30 June 2009**

\$

*Note*

- Please report part hectares.
- To convert acres to hectares, divide acres by 2.47.
- If exact figures are not available, please provide careful estimates.

**Land not used for agricultural production:**

Hectares

- (a) Land set aside for conservation/protection purposes (including land that is largely unmodified and managed to preserve its condition) ... ..  ,  .
- (b) Other areas not used for agricultural production (including houses and buildings, services and access areas, water bodies, mining leases where the lease area cannot be used for agriculture and other agriculturally unproductive or inaccessible areas) ... ..  ,  .

**Land mainly used for agricultural production:**

- (c) Land mainly used for crops (including sugar, grains, vegetables, fruit, nuts, cotton, grapevines and nurseries etc., including land left fallow between crops) ... ..  ,  .
- (d) Land mainly used for grazing (including land spelled between stock rotations)
- Grazing on improved pastures ... ..  ,  .
  - Grazing on other land (including natural pastures/grasslands, rangelands, woodland/shrubland, forested areas, riparian areas and swamps/wetland) ... ..  ,  .
- (e) Land mainly used for forestry plantation ... ..  ,  .
- (f) Land mainly used for other agricultural purposes (including packing sheds, feedlots, piggery and poultry sheds) ... ..  ,  .
- (g) **Total area of the holding (should equal the total area of the holding in Question 1)** ... ..  ,  .

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**Part B – Soil testing for nutrients**

*Note*

- Soil testing for nutrients includes testing on the holding for macro nutrients (e.g. N, P, K, S) and micro nutrients (e.g. Zn, Fe, Cu).

**3 Did any soil testing for nutrients occur on the holding between 1 July 2008 and 30 June 2009?**

- No   Go to **Part C** on page 5
- Yes

**4 What was the timing of soil testing for nutrients between 1 July 2008 and 30 June 2009?**

Tick all that apply

- (a) Calendar basis (e.g. weekly, monthly, yearly) ...
- (b) Prior to planting ...
- (c) Dependent on weather conditions ...
- (d) None of the above ...

**5 Which of the following soil testing strategies were used on the holding between 1 July 2008 and 30 June 2009?**

Tick all that apply

- (a) Each paddock was tested on a regular basis in conjunction with yield/production information to make fertiliser application decisions
- (b) Soil samples were based on soil types across paddocks/blocks ...
- (c) Soil samples were based on soil types within paddocks/blocks ...
- (d) Random samples taken across the holding ...
- (e) Geo-referenced samples from holding soil maps ...
- (f) Other ...

**Part C – Fertiliser use**

*Note*

Fertiliser includes both chemical fertilisers such as ammonium sulphate, urea, superphosphates etc., and 'by-product' fertilisers/soil conditioners such as dunder or mill mud/ash.

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**6 Did you apply any fertiliser to the holding between 1 July 2008 and 30 June 2009?**

- No  Go to **Part D** on page 7
- Yes

**7 How much fertiliser was applied to the holding between 1 July 2008 and 30 June 2009?**

Please convert liquid fertilisers at ratio of 1000 Litres to 1 Tonne

Crop type			
Sugar cane		Other crops	Pasture
Plant cane	Ratoons		

	Tonnes	Tonnes	Tonnes	Tonnes
(a) Chemical fertiliser ...	<input style="width: 100px;" type="text"/>	<input style="width: 100px;" type="text"/>	<input style="width: 100px;" type="text"/>	<input style="width: 100px;" type="text"/>
(b) Dunder ...	<input style="width: 100px;" type="text"/>	<input style="width: 100px;" type="text"/>	<input style="width: 100px;" type="text"/>	<input style="width: 100px;" type="text"/>
(c) Mill mud/ash ...	<input style="width: 100px;" type="text"/>	<input style="width: 100px;" type="text"/>	<input style="width: 100px;" type="text"/>	<input style="width: 100px;" type="text"/>
(d) Animal manure	<input style="width: 100px;" type="text"/>	<input style="width: 100px;" type="text"/>	<input style="width: 100px;" type="text"/>	<input style="width: 100px;" type="text"/>
(e) Other fertilisers	<input style="width: 100px;" type="text"/>	<input style="width: 100px;" type="text"/>	<input style="width: 100px;" type="text"/>	<input style="width: 100px;" type="text"/>

**8 Which of the following did you use to decide how much fertiliser to apply between 1 July 2008 and 30 June 2009?**

Tick all that apply

- (a) Leaf and/or stem tests .....
- (b) Soil testing.....
- (c) Soil type/productivity zone mapping .....
- (d) Previous paddock yields .....
- (e) Standard/historical annual rate .....
- (f) Seasonal conditions .....
- (g) Crop stage .....
- (h) Cost of fertiliser .....
- (i) Other .....

**9 Which of the following fertiliser application methods did you use between 1 July 2008 and 30 June 2009?**

Tick all that apply

- (a) Fertigation .....
- (b) Surface application – broadcast .....
- (c) Surface application – banded .....
- (d) Sub-surface application .....
- (e) Split application .....
- (f) None of the above .....

**10 Which of the following factors did you consider when deciding to apply fertiliser between 1 July 2008 and 30 June 2009?**

Tick all that apply

- (a) Crop stage – pre planting .....
- (b) Crop stage – post harvest .....
- (c) Crop stage – while crops actively growing .....
- (d) Irrigation schedule .....
- (e) Weather forecast .....
- (f) Other .....

**11 Which of the following external factors did you consider when deciding how much fertiliser to apply between 1 July 2008 and 30 June 2009?**

Tick all that apply

- (a) Consultant's and/or contractor's recommendations .....
- (b) Latest industry recommended rates .....
- (c) Economic or productivity advice (e.g. as much as can be afforded up to the recommended rate) .....
- (d) None of the above .....

**SAMPLE ONLY**

**12 How often was your fertiliser application equipment calibrated between 1 July 2008 and 30 June 2009?**

Tick all that apply

- (a) Never .....
- (b) Calendar basis (e.g. weekly, monthly, yearly) .....
- (c) Whenever a new product is used .....
- (d) Whenever a new batch of fertiliser is used .....
- (e) At each paddock/block .....
- (f) Equipment automatically or self calibrates .....
- (g) Not applicable - use contractors .....
- (h) None of the above .....

**13 Which of the following did you consider prior to determining fertiliser application rates between 1 July 2008 and 30 June 2009?**

Tick all that apply

- (a) Nutrient loss from previous crops .....
- (b) Nutrients introduced by fertilising .....
- (c) Nutrient levels in ground water .....
- (d) Nutrient credits obtained from legumes and other nitrogen producing fallow crops .....
- (e) None of the above .....

**SAMPLE ONLY**

**Part D – Chemical use**

*Note*

- Use of chemicals includes herbicides, insecticides, fungicides, plant growth regulators and miticides

**14 Did you use any herbicides on the holding between 1 July 2008 and 30 June 2009?**

No  Go to Question 17

Yes

**15 Did you apply any herbicides using spot spraying between 1 July 2008 and 30 June 2009?**

No

Yes

16 For other types of herbicide application (e.g. boom spraying) please report the area of land on which the following types of herbicides were used between 1 July 2008 and 30 June 2009

Hectares

(a) Full rate of pre-emergents

Scale bar with 10 units and a decimal point box.

(b) Knockdown plus other herbicides

Scale bar with 10 units and a decimal point box.

(c) Knockdown only

Scale bar with 10 units and a decimal point box.

(d) Not applicable

Small square checkbox.

17 Did you use any other chemicals (excluding chemicals associated with animal husbandry) on the holding between 1 July 2008 and 30 June 2009?

No

Yes

18 Which of the following methods did you use to decide when to apply chemicals between 1 July 2008 and 30 June 2009?

Tick all that apply

(a) Applied at a set time (e.g. weekly, monthly, crop cycle, post cycle, according to industry guidelines)

Small square checkbox.

(b) Crop or stock monitoring

Small square checkbox.

(c) Weed or pest monitoring

Small square checkbox.

(d) Used a fully integrated weed or pest management program

Small square checkbox.

(e) Other

Small square checkbox.

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19 Which of the following methods did you use to apply chemicals on the holding between 1 July 2008 and 30 June 2009?

Tick all that apply

(a) Broadcasting or complete cover application

Small square checkbox.

(b) Targeted application (e.g. spot spraying, shielded spraying, bonding)

Small square checkbox.

(c) Other

Small square checkbox.

20 How often was your chemical application equipment calibrated between 1 July 2008 and 30 June 2009?

Tick all that apply

(a) Never

Small square checkbox.

(b) Calendar basis (e.g. weekly, monthly, yearly)

Small square checkbox.

(c) Whenever a new product is used

Small square checkbox.

(d) Whenever a new batch of chemical is used

Small square checkbox.

(e) At each paddock/block

Small square checkbox.

(f) Equipment automatically or self calibrates

Small square checkbox.

(g) Not applicable - use contractors

Small square checkbox.

(h) None of the above

Small square checkbox.



**21 Did you use any of the following alternate control methods for weeds, pests or diseases between 1 July 2008 and 30 June 2009?**

Tick all that apply

**Chemical**

(a) Rotated chemical groups to avoid resistance ... ..

(b) Used chemicals you considered to be more environmentally friendly

**Mechanical**

(c) Cultivation ... ..

(d) Slashing ... ..

(e) Mulching or matting... ..

**Other**

(f) Biological control (i.e introducing parasites, predators or pathogens as control methods)... ..

(g) Practiced good farm hygiene ... ..

(h) Variety (crop or breed) selection ... ..

(i) Break cropping ... ..

(j) Controlled burning ... ..

(k) Used National Standard for Organic and Bio-dynamic Produce ... ..

(l) None of the above ... ..

**SAMPLE ONLY**

**22 Did you use any of the following practices to avoid 'off farm' chemical loss between 1 July 2008 and 30 June 2009?**

Tick all that apply

(a) Used contour banking and/or row planting direction... ..

(b) Avoided planting times and chemical applications in periods of high rainfall risk or irrigation schedule ... ..

(c) Used cover crops or inter row mulching ... ..

(d) Changed farm layout to recommended industry best practice (e.g. silt traps, grassed spoon drains or rubble drains, vegetated buffer strips) ... ..

(e) None of the above ... ..

**Part E – Riparian management**

**23 Which of the following riparian management practices did you use on the holding between 1 July 2008 and 30 June 2009?**

Tick all that apply

(a) Actively controlled stock access to riparian areas... ..

(b) Riparian areas fully fenced off and alternate water points established

(c) Cattle ramps constructed into creek and river banks to minimise damage ... ..

(d) No rivers or creeks on the holding ... ..

(e) None of the above ... ..

**Part F – Surface water management**

**24 Which of the following water run-off management practices were used on the holding between 1 July 2008 and 30 June 2009?**

*Note*

- Water management practices include managing rainfall run-off.

Tick all that apply

- (a) Recycling pits or sediment dams ... ..
- (b) Furrow management (including banking ends, ripping, modifying furrow shapes) ... ..
- (c) Grassed or rubble spoon drains ... ..
- (d) Contour banks, diversion banks or constructed waterways ... ..
- (e) Maintained at least 40% ground cover in riparian areas and/or constructed waterways ... ..
- (f) Ensured at least 40% ground cover remained on paddocks at the end of the 2008 dry season (October - November) ... ..
- (g) Other water run-off practices ... ..
- (h) Water run-off practices not required on the holding ... ..

**SAMPLE ONLY**

**Part G – Irrigation water management**

**25 Did you irrigate any part of the holding between 1 July 2008 and 30 June 2009?**

- No  Go to Question 27
- Yes

**26 Which of the following irrigation water management practices were in place on the holding between 1 July 2008 and 30 June 2009?**

Tick all that apply

- (a) Tail water reuse ... ..
- (b) Laser levelling ... ..
- (c) Alternate row irrigation scheduling ... ..
- (d) Water piping or channel covered/lined to reduce losses ... ..
- (e) Introduction of more efficient irrigation scheduling ... ..
- (f) Grassed waterways or channels ... ..
- (g) Efficient irrigation equipment ... ..
- (h) None of the above ... ..

**Part H – Sugar cane**

**27 Did you grow sugar cane on the holding between 1 July 2008 and 30 June 2009?**

No  Go to Question **32**

Yes

**28 What area of land was prepared for sugar cane between 1 July 2008 and 30 June 2009, using the following:**

	Plant cane (Hectares)	Ratoons (Hectares)
(a) Zero till .....	<input type="text" value="0"/>	<input type="text" value="0"/>
(b) Minimal zonal till .....	<input type="text" value="0"/>	<input type="text" value="0"/>
(c) Full cultivation .....	<input type="text" value="0"/>	<input type="text" value="0"/>

**29 What crop residue (trash) management practices were used on your sugar cane crop between 1 July 2008 and 30 June 2009?**

*Note*

- Include each area only once.
- Include failed crops.

SAMPLE ONLY

	Hectares
(a) Most trash removed by baling or other methods .....	<input type="text" value="0"/>
(b) Trash removed by a hot burn (e.g. cane fire) .....	<input type="text" value="0"/>
(c) Trash removed by a cool burn (e.g. trash burn) .....	<input type="text" value="0"/>
(d) Trash was incorporated into the soil .....	<input type="text" value="0"/>
(e) Trash was left untouched .....	<input type="text" value="0"/>

**30 Do you use a secondary (break) crop phase in your sugar cane cropping rotation?**

No  Go to Question **31**

Yes

Tick one box only

(a) A break crop was used in 2008-09 .....	<input type="checkbox"/>
(b) The 2008-09 season did not allow for break cropping .....	<input type="checkbox"/>



**36 Did you use any of the following on the holding between 1 July 2008 and 30 June 2009?**

Tick all that apply

- (a) Permanent or preformed beds .....
- (b) Permanent traffic lanes .....
- (c) Wheel spacing for all equipment (including harvesting) matching row spacing .....
- (d) GPS guided steering technology .....
- (e) Dual row harvesting .....
- (f) Zero till planter .....
- (g) None of the above .....

**37 Did you use alternate or cover crops (to maintain ground cover) between your main horticultural crop plantings between 1 July 2008 and 30 June 2009?**

- No
- Yes

**38 Did you use any other management techniques (e.g. mulching, matting) to maintain ground cover between 1 July 2008 and 30 June 2009?**

- No
- Yes


**SAMPLE ONLY**

**Part J – Broadacre crops and/or cotton (excluding sugar cane)**

*Note*

- Cultivation includes discing, ploughing, scarifying and harrowing etc.
- Include each area only once.
- Do not include post-sowing cultivation.

**39 Did you prepare (spray, cultivate or sow) any land for broadacre crops and/or cotton on the holding between 1 July 2008 and 30 June 2009?**

- No   Go to Question **44**
- Yes

**40 Please show the area of land prepared for broadacre crops and/or cotton between 1 July 2008 and 30 June 2009, using the following:**

Hectares

- (a) Zero till .....  ,  ,  ,  ,  .  0
- (b) Minimal zonal till .....  ,  ,  ,  ,  .  0
- (c) Full cultivation .....  ,  ,  ,  ,  .  0

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**41 Please show the area of land used for broadacre crops and/or cotton by the approximate period between harvesting and sowing (fallow period) between 1 July 2008 and 30 June 2009**

*Including*

- Areas which have been pasture topped, cultivated or had knockdown herbicides applied

*Excluding*

- Areas under pasture
- Fallow due to drought

Hectares

- (a) Less than 3 months .....  ,  ,  ,  ,  .  0
- (b) 3 to 9 months .....  ,  ,  ,  ,  .  0
- (c) More than 9 months .....  ,  ,  ,  ,  .  0



**46 Which of the following pasture management practices did you use on the holding between 1 July 2008 and 30 June 2009?**

Tick all that apply

- (a) Irrigated pastures ...
- (b) Planted or managed pastures that last for 2 years or more (native or improved) ...
- (c) Planted pastures that last for one year only (native or improved) ...
- (d) Managed predominantly pre-existing native pastures ...
- (e) Fenced according to land types ...
- (f) Did not manage or improve pastures ...

**47 Are you able to provide an estimate of the extent of your ground cover at the end of the 2008 dry season (October - November)?**

- No  Go to Question 49
- Yes

**48 What is the estimate of the ground cover at that time?**

Tick one box only

- (a) Greater than 70% ...
- (b) Between 40% and 70% ...
- (c) Between 15% and 40% ...
- (d) Less than 15% ...

**SAMPLE ONLY**

**Part K – Comments and time taken**

**49 Please provide comments**

– on any information you have supplied on this form (e.g. related to unusual movements or other factors) (Please use BLOCK letters)

– on any difficulties you had providing the requested information, or suggested improvements to this form (Please use BLOCK letters)

**50 Please provide an estimate of the time taken to complete this form**

**Including**

- The time actually spent reading the instructions, working on the questions and obtaining the information
- The time spent by all employees in collecting and providing this information

hrs mins

**Thank you for completing this form**