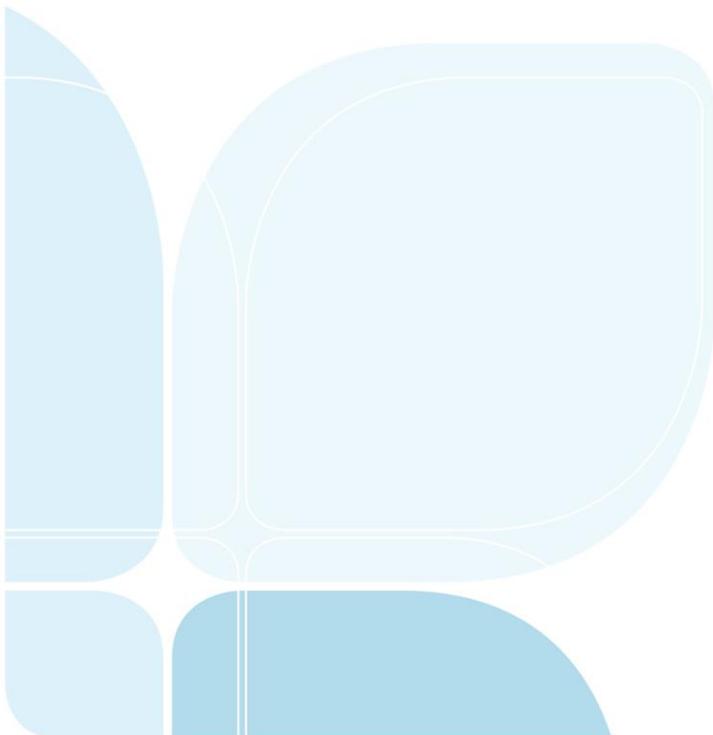




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Hunter Local Land Services



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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing September 2019. However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of Local Land Services or the user's independent adviser.

This report was commissioned as part of the MACH Energy Weed Management in Box Woodland project through funding provided by MACH Energy Australia.

Executive Summary

This report presents the findings of a mail and web based survey of landholders on the Merriwa plateau.

The objective of the survey was to develop a benchmark of landholder attitudes, beliefs and behavioural practices in relation to the management and benefits of Box Gum Grassy Woodland.

Landholders were sampled from the geographic area of the Merriwa plateau, which included the localities of Merriwa, Cassilis, Gungal, Kars Springs and Bunnan. The questionnaire was mailed to 565 landholders in May and June 2019. A total of 150 questionnaires were completed and returned by landholders (respondents).

Characteristics of landholders

Eighty-four percent of landholders were male; the average age was 64 years with 59% of landholders living on their property. Landholder had managed rural land for an average of 30 years and those landholders who lived on their property had done so for an average of 23 years.

Property characteristics

The average property size was 129 hectares, with a third of landholders owning or managing properties of 50 hectares or less. Sixty-nine percent of landholders had livestock on their property, with 94% of these landholders running cattle, using most commonly a rotational grazing strategy.

Only 5% of landholders had a conservation agreement on their property and only 10% of landholders indicated they would be interested in having a conservation agreement on their property in the future.

Box Gum Grassy Woodland

Fifty-two percent of landholders had heard of Box Gum Grassy Woodland, with 44% indicated they were able to identify Box Gum Grassy Woodland when they saw it.

Landholders indicated they could identify Box Gum Grassy Woodland using specific characteristics including most commonly an understory of native grasses, forbs, clovers, legumes and shrubs; the presence of Box trees; and tree density or spacing.

Sixty-eight percent of landholders indicated they had Box Gum Grassy Woodland on their property, with the average area of Box Gum Grassy Woodland being 81 hectares or 26% of the property area.

When asked to identify threats to Box Gum Grassy Woodland, the majority of landholders indicated that pest animals' increased grazing pressure, prevented the regeneration of native vegetation and increased weeds.

Only 12% of landholders had contacted an organisation in relation to its management of Box Gum Grassy Woodland, with Local Land Services being the organisation most commonly contacted

Value of native vegetation

Landholders defined native vegetation as plants that were 'indigenous, endemic or native to an area' or that native vegetation consisted of 'plants, trees and grasses that were native or growing in a natural state'.

The majority of landholders indicated they had native vegetation on their property, with 24% indicating the condition of native vegetation was worse now when compared to five years ago and 30% indicated it was in a better condition now when compared to five years ago.

Landholders also reported the condition of native vegetation improved through spelling or resting paddocks; destocking and better grazing management; and declined as a consequence of drought conditions.

Nearly all landholders believed native vegetation was important on their property as it controlled erosion, reduced land degradation and provided habitat for native animals.

Two thirds of landholders indicated they had actively managed native vegetation on their property in the past three years, primarily through weed control and grazing management.

While a third of all landholders were currently encouraging native vegetation growth and actively managing weeds within areas of native vegetation, a quarter of all landholders were interested in the future in undertaking revegetation, including planting native vegetation, seeding and developing wind breaks.

Forty-five percent of landholders indicated they had goals to improve or manage native vegetation or habitat, with the majority of landholders indicating their goal was to revegetate specific areas.

Forty-four percent of landholders reported a 'medium' ability to achieve their goals in relation to native vegetation, with an additional 32% indicating their ability was 'high'.

Landholders who indicated they lacked the ability to achieve their goals in relation to native vegetation indicated this was due to 'poor seasonal or climatic conditions'; 'limited time available to do the work' or 'limited access to funds to undertake the work'.

Birdlife

Eighty-seven percent of landholders reported they had an interest in native birds on their property.

Forty-six percent of landholders indicated they had heard of the Regent Honeyeater or the Swift Parrot, with the most common description of these birds being that they were an endangered or threaten species or that they were migratory.

St John's Wort

Half of all landholders reported that St John's Wort occurred on their property, with 45% reporting St John's Wort to be of minor or no concern and 55% indicating it was of moderate or major concern.

The most commonly reported reasons for St John's Wort being of concern, was that it reduced the value of the property, it impacted on stock health and it competed with pasture and other plants.

Amongst those landholders with St John's Wort on their property, nearly all had actively managed the weed within the last three years, with management of the weed occurring primarily on ungrazed areas.

Chemicals and 'removal by hand' were the two most common methods of control for St John's Wort, with these methods being used as they were 'cost effective' or they had 'limited impact on pastures and native vegetation'.

The majority of landholders indicated the methods they had used for the control of St John's Wort, (primarily chemicals), had been 'very successful'

Other weeds

Three quarters of landholders indicated they had weeds other than St John's Wort that were of concern on their property, with the most common weeds being Prickly Pear (83%), Blue Heliotrope (33%) and Fireweed (28%).

The primary impacts associated with property weeds were that they 'competed with native plants and vegetation'; the cost of weed control; the loss of desirable pasture plants and that they were 'harmful to livestock'.

Seventy percent of landholders indicated they had been successful in managing weeds on their property, with success being achieved through herbicide control and the 'manual removal of weeds'.

The reasons given for the unsuccessful management of weeds included the 'lack of money'; the 'lack of labour and help'; not living on the property; and that the age of the landholder limited what they could do.

Engagement and capacity building

The two most commonly reported sources of information about land management included 'neighbours and other landholders' and 'factsheets, books, magazines or guides'.

Sixteen percent of landholders were members of a local industry, producer or conservation group, which included Landcare, the Goulburn River Wild Dog Association and the Upper Hunter Sustainable Farming Group.

In relation to activities undertaken by Hunter Local Land Services the majority of landholders indicated they had heard of field days, demonstration days and the Hunter Local Land Services website.

Fifty-five percent of all landholders indicated they had contact or communication with Hunter Local Land Services in the last three years.

Across all landholders, 16% had previously applied to Hunter Local Land Services for incentives or funding to improve river, native vegetation or pasture health and of these landholders 75% indicated they were successful in obtaining incentives or funding from Hunter Local Land Services.

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Introduction

Local Land Services brings together agricultural production advice, biosecurity, natural resource management and emergency management into a single organisation. As a regional organisation they are responsible for delivering services that add value to local industries, enhance natural resources, protect industries from pests and disease and help communities respond to emergencies such as flood, fire and drought. Hunter Local Land Services has undertaken a survey of landholders on the Merriwa plateau to help inform the delivery of projects and programs associated with the conservation of Box Gum Grassy Woodland.

Objectives

The core objectives of the project were to:

- Gain a better understanding of landholders understanding of and attitudes towards the management and benefits of Box Gum Woodlands; and
- Benchmark existing landholder knowledge and understanding of Box Gum Woodland threats, recovery actions and appropriate restoration activities.

Methodology

There were two core components to the project methodology which included (i) questionnaire design and (ii) the implementation of the survey.

Questionnaire design

The questionnaire was developed through discussions with Hunter Local Land Services staff.

The questionnaire was designed for use as a self-completion hard copy questionnaire, although an equivalent web based questionnaire was also developed if people chose to complete the questionnaire online.

The questionnaire focused on several core areas of interest which included:

1. The characteristics of survey landholders (respondents);
2. The identification and awareness of Box Gum Woodland;
3. The value of native vegetation and fauna on properties;
4. The prevalence and management of weeds including specifically St John's Wort;
5. Current land management practices; and
6. Engagement and capacity building.

The questionnaire used in the survey is presented in Appendix A.

Survey sampling and implementation

Landholders were sampled from the geographic area of the Merriwa plateau, which included the localities of: Merriwa, Cassilis, Gungal, Kars Springs and Bunnan. The properties and mailing addresses were obtained from Local Land Services FARMS database, which holds customer information records including property details.

The questionnaire was mailed to 565 landholders in the region between the 30th of May and 5th of June 2019.

A reminder letter was sent on the 2nd of July 2019 to those landholders who had not completed the questionnaire.

Landholders were informed the final date for the completion of questionnaires was the 18th of July 2019.

Twenty seven questionnaires were returned unopened or uncompleted, due to reasons including for example incorrect address information, duplicate addresses or that the property had been sold.

A total of 150 questionnaires were completed and returned. When the 27 unopened and uncompleted questionnaires from the total of 565 were excluded, the survey response rate was 27.8%.

Analysis of survey data

The analysis of survey data included frequency tables which were used to describe responses to all survey questions. It is important when interpreting tables to examine the notes in the footnote of the table as this will assist in the accurate interpretation of the table.

The questionnaire included several questions which allowed people to provide multiple answers or responses. For instance, in identifying the major characteristics people use to identify Box Gum Grassy Woodland, people may have identified one or any number of specific characteristics. Similarly, in describing how they defined native vegetation several different characteristics may have been identified.

Tables based on the analysis of multiple responses have been identified in the footnote of each table. In these tables a single person may be included in multiple rows of the table if they have provided multiple responses to the question. In these tables it is important not to sum across the rows of the table so as to avoid double counting of individuals who may be reported in multiple rows.

Although the total sample included 150 landholder responses, the analysis of specific questions may be based on a sample which is somewhat lower than the total sample size. This is due to people being unable or unwilling to answer the question or people refusing or omitting to answer the question.

Characteristics of landholders

Table 1 indicates that 84% of all landholders completing the survey were male and 16% were female.

Table 1: "What is your gender?"

Response	Count	Percent
Male	122	83.6
Female	24	16.4
Total respondents	146	100.0

Source: EBC (2019).

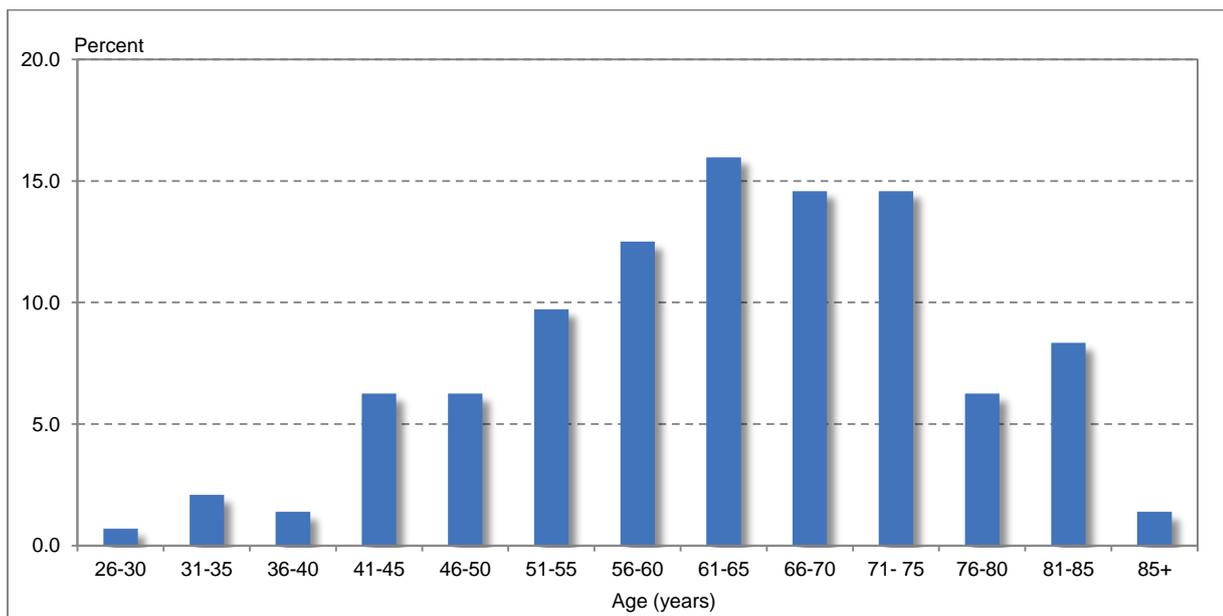
The age of landholders completing the survey varied between 29 and 88 years, with the average age being 64 years (Table 2 and Figure 1).

Table 2: "In what year were you born?"

Age (years)	Count	Percent	Cumulative Percent
26-30	1	0.7	0.7
31-35	3	2.1	2.8
36-40	2	1.4	4.2
41-45	9	6.3	10.4
46-50	9	6.3	16.7
51-55	14	9.7	26.4
56-60	18	12.5	38.9
61-65	23	16.0	54.9
66-70	21	14.6	69.5
71-75	21	14.6	84.0
76-80	9	6.3	90.3
81-85	12	8.3	98.6
86+	2	1.4	100.0
Total respondents	144	100.0	
Median age (years)			64.0

Source: EBC (2019).

Figure 1: age of landholders



Source: EBC (2019).

Nearest town to property

The towns of Merriwa (74%) and Cassilis (14%) were the nearest to landholder properties (Table 3).

Table 3: “What is the nearest town to your property?”

Response	Count	Percent
Merriwa	110	74.3
Cassilis	21	14.2
Scone	7	4.7
Sandy Hollow	3	2.0
Denman	2	1.4
Muswellbrook	2	1.4
Other (<i>frequency of one</i>)	3	2.1
Total respondents	148	100.0

Source: EBC (2019).

Years lived on property

Table 4 indicates that 59% of all landholders usually lived on their property.

Table 4: “Do you usually live on your property?”

Response	Count	Percent
Yes	87	58.8
No	61	41.2
Total respondents	148	100.0

Source: EBC (2019).

Table 5 and Figure 2 show that 47% of all landholders had lived on their property for less than 20 years, with a third living on their property for up to 10 years.

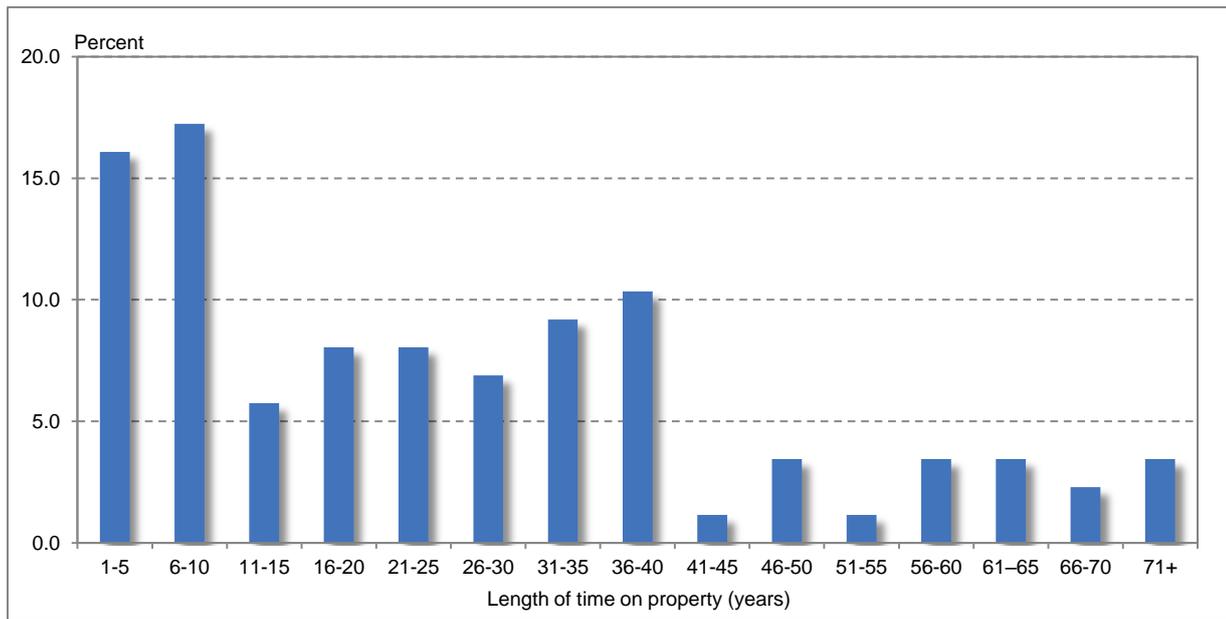
Table 5: “How many years have you lived on your current property?”

Years lived on current property	Count	Percent	Cumulative Percent
1-5	14	16.1	16.1
6-10	15	17.2	33.3
11-15	5	5.7	39.1
16-20	7	8.0	47.1
21-25	7	8.0	55.2
26-30	6	6.9	62.1
31-35	8	9.2	71.3
36-40	9	10.3	81.6
41-45	1	1.1	82.8
46-50	3	3.4	86.2
51-55	1	1.1	87.4
56-60	3	3.4	90.8
61-65	3	3.4	94.3
66-70	2	2.3	96.6
71+	3	3.4	100.0
Total respondents	87	100.0	
Median years			23.0

Note: Percentages based on only those respondents who indicated they usually lived on their property.

Source: EBC (2019).

Figure 2: length of time lived on current property



Source: EBC (2019).

Years managed rural land

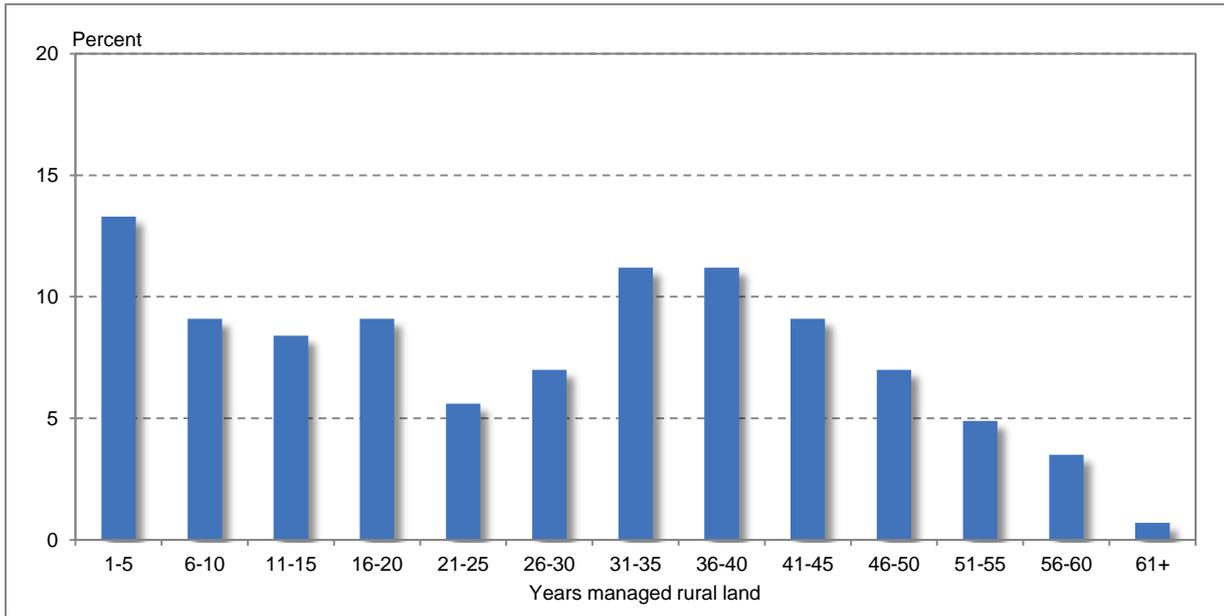
Table 6 and Figure 3 show that nearly half of all landholders (46%) had managed rural land for more than 30 years.

Table 6: “How many years have you managed rural land?”

Years managed rural land	Count	Percent	Cumulative Percent
1-5	19	13.3	13.3
6-10	13	9.1	22.4
11-15	12	8.4	30.8
16-20	13	9.1	39.9
21-25	8	5.6	45.5
26-30	10	7.0	52.5
31-35	16	11.2	63.6
36-40	16	11.2	74.8
41-45	13	9.1	83.9
46-50	10	7.0	90.9
51-55	7	4.9	95.8
56-60	5	3.5	99.3
61+	1	0.7	100.0
Total respondents	143	100.0	
Median years			30.0

Source: EBC (2019).

Figure 3: length of time managed rural land



Source: EBC (2019).

Property characteristics

The survey of landholders identified property characteristics, including property size, the type of livestock on properties, the grazing management regimes used and whether the property had a conservation agreement.

Property size

In relation to all landholders the average property size was 129 hectares. As shown in Table 7, 34% or a third of all landholders owned or managed properties of 50 hectares or less and 44% owned or managed properties of 100 hectares or less.

Table 7: “How large is your property?”

Hectares	Count	Percent	Cumulative Percent
1 - 25	22	15.0	15.0
26 - 50	28	19.0	34.0
51 - 75	7	4.8	38.8
76 - 100	7	4.8	43.6
101 – 200	16	10.9	54.5
201 – 300	12	8.2	62.6
301 - 400	3	2.0	64.7
401 - 500	6	4.1	68.7
501 - 600	3	2.0	70.8
601 - 700	5	3.4	74.2
701 - 800	4	2.7	76.9
801 - 900	3	2.0	78.9
901 – 1,000	4	2.7	81.7
1,001 – 2,000	14	9.5	91.2
2,001 – 3,000	7	4.8	96.0
3,001 – 4,000	1	0.7	96.6
4,001 – 5,000	2	1.4	98.0
5,001 +	3	2.0	100.0
Total landholders	147	100.0	
Median hectares			129.0

Source: EBC (2019).

Livestock on property

Table 8 indicates that 69% of all landholders had livestock on their property.

Table 8: “Do you run livestock on your property?”

Response	Count	Percent
Yes	102	68.5
No	47	31.5
Total respondents	149	100.0

Source: EBC (2019).

Table 9 shows that cattle (94%) were the most common type of livestock on properties, followed by horses (32%) and sheep (27%).

Table 9: “What type of livestock do you have?”

Livestock	Count	Percent
Cattle	95	94.1
Horses	32	31.7
Sheep	27	26.7
Other livestock	5	5.0
Total landholders	101	100.0

Note: Percentages based on only those respondents who reported they ran livestock on their property.
Other livestock included goats (4) and free range chickens (1)
This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2014).

The majority of landholders adopted a rotational grazing strategy (55%), with approximately a quarter (26%) using set or fixed stocking (Table 10).

Table 10: “What type of grazing strategies are you using on your property?”

Grazing strategy	Count	Percent
Rotational grazing	53	55.2
Set or fixed stocking	25	26.0
Mob grazing	18	18.8
Cell grazing	14	14.6
Tactical grazing	11	11.5
Rational grazing	6	6.3
Other grazing strategies	3	3.1
Total landholders	96	100.0

Note: Percentages based on only those respondents who reported they ran livestock on their property.
Other grazing strategies included “holistic”, “minimal grazing”; and “cattle access all areas”
This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2014).

Conservation agreements

Only seven landholders (5%) indicated they had a conservation agreement on their property (Table 11).

Table 11: “Do you have a conservation agreement on your property?”

Response	Count	Percent
Yes	7	4.7
No	142	95.3
Total respondents	149	100.0

Source: EBC (2019).

Amongst those landholders who did not have a conservation agreement on their property, only 10% indicated they would be interested in having a conservation agreement on their property in the future (Table 12).

Table 22: “Would you be interested in a conservation agreement on your property?”

Response	Count	Percent
Yes	13	9.5
No	75	54.7
Maybe	49	35.8
Total respondents	137	100.0

Note: Percentages based on only those respondents who reported they did not have a conservation agreement on their property
Source: EBC (2019).

Box Gum Grassy Woodland

Landholders were asked about their awareness of Box Gum Grassy Woodland, the area of Box Gum Grassy Woodland on their property and the threats to Box Gum Grassy Woodland on their property.

Awareness and knowledge of Box Gum Grassy Woodland

Fifty-two percent of landholders had heard of Box Gum Grassy Woodland (Table 13).

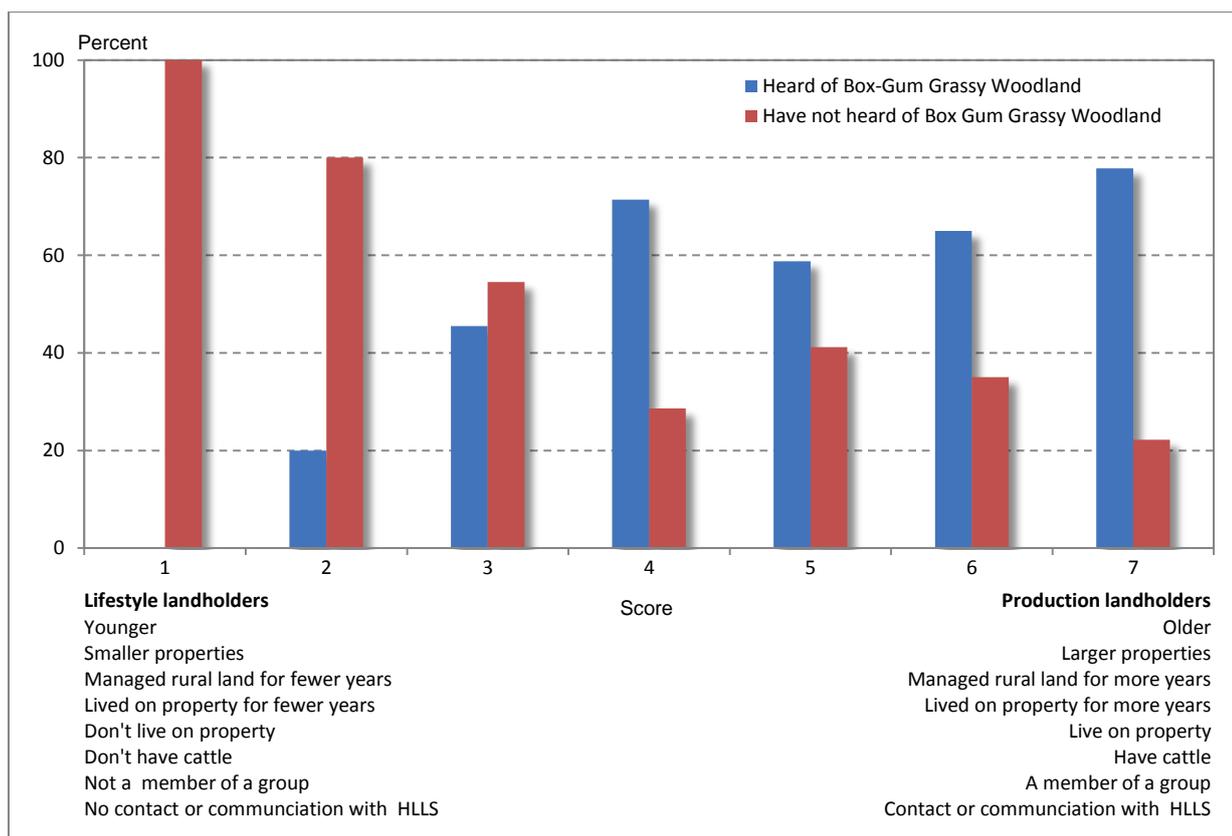
Table 33: "Have you heard of Box-Gum Grassy Woodland?"

Response	Count	Percent
Yes	78	52.3
No	71	47.7
Total respondents	149	100.0

Source: EBC (2019).

In addition, Figure 4 shows that 'production' landholders were more likely to have heard on Box Gum Grassy Woodland when compared to 'lifestyle' landholders.

Figure 4: heard of Box Gum Grassy Woodland by landholder profile



Note: A score of one (1) indicates all attributes described on the left of the table. A score of seven (7) indicates landholders with all attributes described on the right of the table.

Source: EBC (2019).

Across all landholders in the sample, 44% indicated they were able to identify Box Gum Grassy Woodland when they saw it (Table 14).

Table 44: “Are you able to identify Box-Gum Grassy Woodland when you see it?”

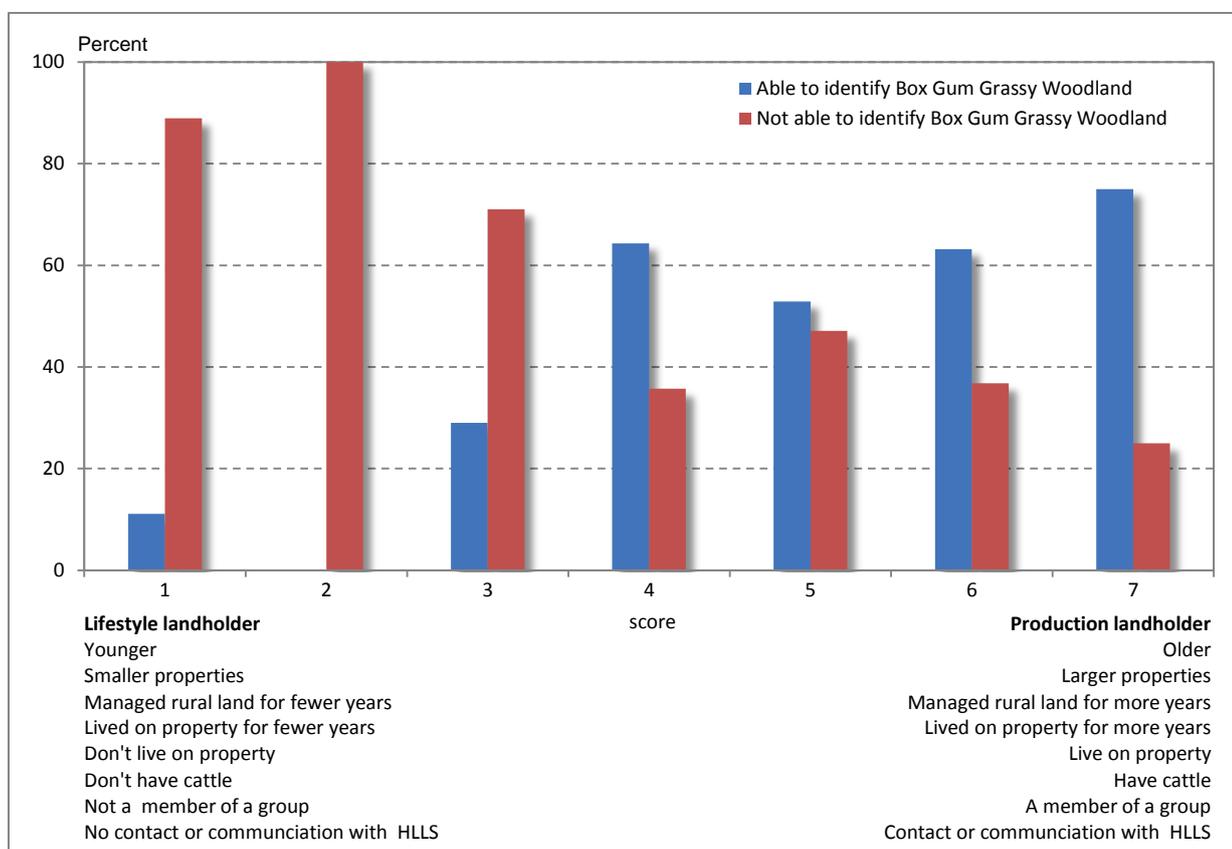
Response	Count	Percent
Yes	64	43.8
No	82	56.2
Total respondents	146	100.0

Note: Those respondents who indicated they were not able to identify Box-Gum Grassy Woodland included the 71 respondents who had not heard of Box-Gum Grassy Woodland (Question 1).

Source: EBC (2019).

In addition, Figure 5 shows that those landholders able to identify Box Gum Grassy Woodland were most likely to be ‘production’ rather than ‘lifestyle’ landholders.

Figure 5: ability to identify Box Gum Grassy Woodland by landholder profile



Note: A score of one (1) indicates all attributes described on the left of the table. A score of seven (7) indicates landholders with all attributes described on the right of the table.

Source: EBC (2019).

When landholders were asked if they could identify native pastures and specific species of Box Gum (Table 15), more landholders indicated they could identify native pastures (37%) and Yellow (37%) and White Box Gums (37%), with fewer able to identify Grey Box (26%) and Blakely's Red Gum (17%).

Table 55: "Which of the following are you able to identify when you see it?"

Response	Count	Percent
Not able to identify Box-Gum Grassy Woodland	85	56.7
Native grass pastures	56	37.3
Yellow Box	55	36.7
White Box	54	36.0
Grey Box	39	26.0
Blakely's Red Gum	26	17.3
Total respondents	150	100.0

Note: Those respondents who indicated they were not able to identify Box-Gum Grassy Woodland included the 82 respondents who indicated they were not able to identify Box-Gum Grassy Woodland when they saw it (Question 2).
This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

Landholders who indicated they could identify Box Gum Grassy Woodland, did so using specific characteristics (Table 16) including most commonly an understory of native grasses, forbs, clovers, legumes and shrubs (57%), the presence of Box trees (26%) and tree density or spacing (21%).

Table 66: "What are the major characteristics that you use to identify Box-Gum Grassy Woodland?"

Response	Count	Percent
Native grass, forbs, clovers, legumes and shrubs understorey	27	57.4
Presence of Box trees	12	25.5
Tree density or spacing (canopy spacing)	10	21.3
Bark characteristics (colour, texture)	6	12.8
Type of trees	6	12.8
Soils (Basalt, good soils, soil type)	5	10.6
Diversity of native vegetation	5	10.6
Leaf characteristics	4	8.5
Appearance (colour)	3	6.4
Few or no shrubs	3	6.4
Location	2	4.3
Shape and form	2	4.3
Tree flowers	2	4.3
Other characteristics	8	17.0
Total respondents	150	100.0

Note: Percentages based on only those respondents who reported they were able to identify Box-Gum Grassy Woodland (Question 2).
Other characteristics included for example altitude; undisturbed by cultivation; native vegetation; presence of native fauna; seeds; and terrain

This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

Area of Box Gum Grassy Woodland on properties

After being shown pictures of White Box, Yellow Box, Blakely's Red Gum and Grey Box (Appendix A); 68% of landholders indicated they had Box Gum Grassy Woodland on their property (Table 17).

Table 17: "Do you have Box-Gum Grassy Woodland on your property?"

Response	Count	Percent
Yes	99	67.8
No	47	32.2
Total respondents	146	100.0

Note: All respondents were shown pictures of White Box, Yellow Box, Blakely's Red Gum and Grey Box prior to answering the question.
Source: EBC (2019).

On those properties with Box Gum Grassy Woodland, landholders indicated there was an average of 81 hectares of Box Gum Grassy Woodland (Table 18).

Table 18: "What do you estimate is the total area of Box-Gum Grassy Woodland on your property?"

Hectares	Count	Percent	Cumulative Percent
No Box-Gum Grassy Woodland on property	47	34.6	34.6
1 - 50	43	31.6	66.2
51 - 100	6	4.4	70.6
101 - 150	8	5.9	76.5
151 - 200	2	1.5	78.0
201 - 250	4	2.9	80.9
251 – 300	1	0.7	81.7
301 - 400	3	2.2	83.9
401 - 500	7	5.1	89.0
501 - 600	3	2.2	91.2
601 - 700	3	2.2	93.4
701 - 800	2	1.5	94.9
801 - 900	1	0.7	95.6
901 – 1,000	0	0.0	95.6
1,001 +	6	4.4	100.0
Total landholders	136	100.0	
Median hectares			80.9

Source: EBC (2019).

Box Gum Grassy Woodland was found to comprise an average of 26% of the property area (Table 19).

Table 19: Area of Box Gum Grassy Woodland as a percentage of total property area

Hectares	Count	Percent	Cumulative Percent
0.1 – 10	24	27.3	27.3
11 - 20	11	12.5	39.8
21 - 30	10	11.4	51.1
31 - 40	14	15.9	67.0
41 - 50	6	6.8	73.9
51 - 60	4	4.5	78.4
61 - 70	3	3.4	81.8
71 - 80	2	2.3	84.1
81 - 90	6	6.8	90.9
91 - 100	8	9.1	100.0
Total landholders	88	100.0	
Median percentage (hectares)			25.8

Note: Percentages based on only those respondents who reported Box-Gum Grassy Woodland on their property (Question 5)
 Source: EBC (2019).

Threats to Box Gum Grassy Woodland

When asked to identify threats to Box Gum Grassy Woodland (Table 20), the majority of landholders indicated that pest animal's increased grazing pressure, prevented the regeneration of native vegetation and increased weeds (63%). Similarly 58% of landholders also indicated that the activities of pest animals in general were a threat to Box Gum Grassy Woodland.

Table 20: "The following activities and processes have the potential to threaten Box-Gum Grassy Woodland. In the past three years which of the following do you think have influenced the condition of Box-Gum Grassy Woodland on your property?"

Threats	Count	Percent
Pest animals increasing grazing pressure, preventing regeneration and increasing weeds	50	63.3
Activities of pest animals	46	58.2
Presence of weeds including perennial and annual grasses and woody weeds	28	35.4
Livestock selectively and overgrazing the more palatable grasses and species	23	29.1
Trampling of vegetation by livestock	18	22.8
Soil compaction by vehicles or farm machinery	11	13.9
Loss of connectivity between separate areas of woodland	9	11.4
Collection of firewood from areas of woodland	8	10.1
'Tidying-up' or the removal of standing dead timber, fallen logs rock or litter	8	10.1
Dryland salinity	6	7.6
An increase in the frequency of fire through areas of woodland	5	6.3
Mowing or slashing grassland in woodland areas	4	5.1
Soil nutrients from fertiliser applications including runoff from other paddocks	4	5.1
The use of herbicides and pesticides to control weeds and agricultural insect pests	3	3.8
The clearing of woodland for routine management activities	2	2.5
Soil acidification from agricultural activities	1	1.3
Total respondents	79	100.0

Note: Percentages based on only those respondents who reported Box-Gum Grassy Woodland on their property (Question 5)
 This is a multiple response table in which a respondent may be included in multiple rows.
 Source: EBC (2019).

Contact with organisations in relation to the management of Box Gum Grassy Woodland

Table 21 shows that only 12% of landholders with Box Gum Grassy Woodland on their property had contacted an organisation in relation to its management.

Table 21: “Have you contacted any organisation in relation to the management of Box-Gum Grassy Woodland on your property?”

Response	Count	Percent
Yes	12	11.9
No	89	88.1
Total respondents	101	100.0

Source: EBC (2019).

Local Land Services was the organisation most commonly contacted by landholders in relation to the management of Box Gum Grassy Woodland (Table 22).

Table 22: “Who have you contacted?”

Response	Count	Percent
Local Land Services (Sustainable management)	8	66.7
Landcare	5	41.7
NSW Biodiversity Conservation Trust	5	41.7
NSW Department of Agriculture	1	8.3
Australian Wildlife Conservancy	0	0.0
Trust for Nature	0	0.0
Total respondents	12	100.0

Note: Percentages based on those respondents who indicated they had contacted an organisation (Question 9)
This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

Value of native vegetation

Landholders were asked how they defined native vegetation, the existence and condition of native vegetation on their properties, the value and management of native vegetation and their goals in relation to the future management of native vegetation on their property.

Knowledge of native vegetation

Many landholders defined native vegetation (Table 23) as plants that were indigenous, endemic or native to an area (26%). In addition, many landholders emphasised that native vegetation consisted of plants, trees and grasses that were native or growing in a natural state (26%).

Table 23: “How would you define native vegetation?”

Response	Count	Percent
Plants indigenous, endemic or native to an area	27	26.0
Native vegetation (inc. grasses, trees and plants growing in natural state)	27	26.0
Undisturbed area of vegetation (uncleared, uncultivated, unsown)	13	12.5
Not introduced	9	8.7
Beneficial to property (erosion control, productivity)	7	6.7
Plants indigenous, endemic or native to Australia	5	4.8
Scrub, bush or bushland	5	4.8
Specific species described (i.e., Kangaroo grass, Ironbark)	5	4.8
Original plants (always existed)	4	3.8
Plants that regenerate themselves (regrowth)	3	2.9
Plants in good condition (healthy)	3	2.9
Habitat for native fauna	3	2.9
Box-Gum Grassy Woodland	2	1.9
Other definitions	11	10.6
Total respondents	104	100.0

Note: This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

Table 24 shows that while many landholders understood the terms ‘pollinators’ (46%) and ‘integrated pest management’ (44%), only a quarter of all landholders understood the term ‘ecosystem services’ (25%).

Table 24: “Do you have a good understanding of the following?” (Counts and percentage indicate an understanding)

Response	Count	Percent
Pollinators	69	46.0
Integrated pest management	66	44.0
Ecosystem services	37	24.7
Total respondents	150	100.0

Note: This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

Existence and condition of native vegetation on properties

Eighty-four percent of landholders indicated they had native vegetation on their property (Table 25).

Table 25: “Do you have any native vegetation on your property?”

Response	Count	Percent
Yes	123	83.7
No	24	16.3
Total respondents	147	100.0

Source: EBC (2019).

While 42% of landholders indicated there had been no change in the condition of native vegetation on their property compared to five years ago, 24% indicated the condition was worse now and 30% indicated it was better now when compared to five years ago (Table 26).

Table 26: “If you were to judge the condition of native vegetation on your property now and compare it to what it was five years ago, would you say it was...?”

Response	Count	Percent
Much better now (1)	16	13.3
Somewhat better now	20	16.7
No different	50	41.7
Somewhat worse now	26	21.7
Much worse now (5)	3	2.5
Don't know	5	4.2
Total respondents	120	100.0
Mean score		2.8

Note: Percentages based on only those respondents who reported native vegetation on their property (Question 18)
 Source: EBC (2019).

Landholders indicated the condition of native vegetation on their property was better now compared to five years ago because of a change in stock management practices, which included spelling or resting paddocks (28%); destocking (22%) and better grazing management (22%).

On the other hand, amongst landholders who reported that the condition of native vegetation on their property was worse now when compared to five years ago, the primary cause for this change was seen as drought conditions (72%).

Table 27: “What do you think has caused the change in the condition of native vegetation?”

Response	Count	Percent
Native vegetation much better now		
Spell or rest paddocks (excluding livestock)	9	28.1
Destock (reduce stocking rate)	7	21.9
Better grazing management (rotational grazing)	7	21.9
Improved management (general)	5	15.6
Rain	3	9.4
Improve infrastructure (fences, off stream watering, tree guards)	3	9.4
Fire cause regeneration	2	6.3
Weed management	2	6.3
Maintain ground cover	2	6.3
Clean up (tidy up) area	2	6.3
Other (i.e., beehives, reduce tillage, stopped logging, thinning smaller trees, drought)	9	28.1
Total respondents	32	100.0
Native vegetation much worse now		
Drought (lack of rain, lack of water, high temperatures)	21	72.4
Presence of weeds	3	10.3
Presence of pest animals	3	10.3
Climate change (change in seasonal conditions)	3	10.3
Clearing	2	6.9
Bushfire	2	6.9
Other (i.e., animals, storms, cattle break trees, vehicle impact)	7	24.1
Total respondents	29	100.0

Note: Percentages based on only those respondents who reported native vegetation on their property (Question 18)
 This is a multiple response table in which a respondent may be included in multiple rows.
 Source: EBC (2019).

Value of native vegetation

Nearly all landholders (98%) with native vegetation on their property also believed native vegetation was important on their property (Table 28).

Table 28: “Do you think native vegetation is important on your property?”

Response	Count	Percent
Yes	119	97.5
No	3	2.4
Total respondents	122	100.0

Note: Percentages based on only those respondents who reported native vegetation on their property (Question 18)
Source: EBC (2019).

There were a number of reasons landholders gave for native vegetation being important on their property (Table 29), including that it controlled erosion (86%), reduced land degradation (81%) and provided habitat for native animals (77%).

Table 29: “Why do you think native vegetation is important on your property?”

Response	Count	Percent
Controls erosion	102	86.4
Reduces land degradation	96	81.4
Provides a habitat for native animals	91	77.1
Contributes to the beauty of my property	82	69.5
Stores carbon	79	66.9
Provides shelter for livestock	75	63.6
Benefits for livestock production	57	48.3
Reduces salinity	55	46.6
Improves water quality or availability	50	42.4
Provides timber for firewood or fencing	47	39.8
Increases agricultural production	21	17.8
Benefits adjoining crops or pastures	18	15.3
Other (pollination, property sustainable, adapted to conditions, selective logging)	4	3.4
Total respondents	118	100.0

Note: Percentages based on only those respondents who reported native vegetation was important on their property (Question 21)
This is a multiple response table in which a respondent may be included in multiple rows.
Source: EBC (2019).

Management of native vegetation

Sixty-percent of landholders who indicated they had native vegetation on their property also indicated they had actively managed native vegetation on their property in the past three years (Table 30).

Table 30: “In the past three years have you actively managed native vegetation on your property?”

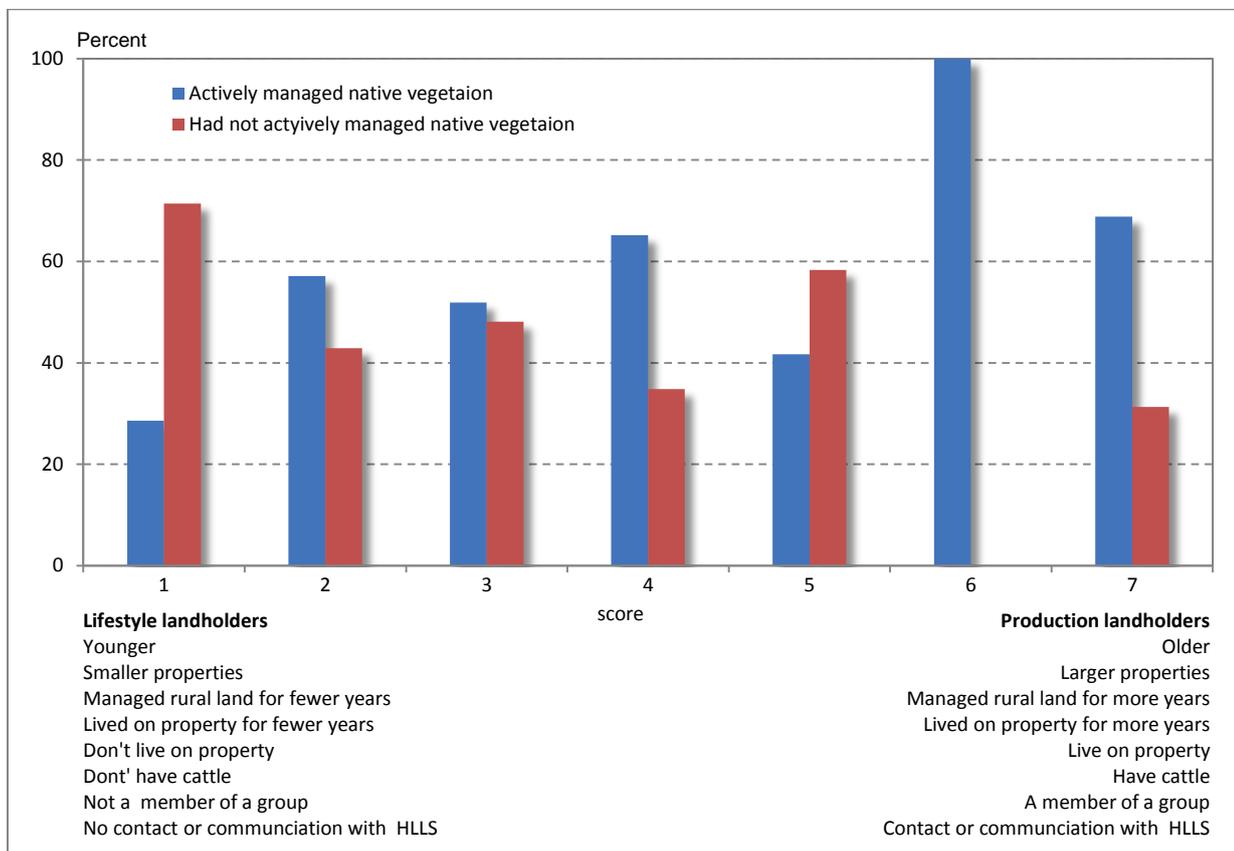
Response	Count	Percent
Yes	72	59.5
No	49	40.5
Total respondents	121	100.0

Note: Percentages based on only those respondents who reported native vegetation on their property (Question 18)

Source: EBC (2019).

In addition, Figure 6 shows that landholders who actively managed native vegetation on their property were more likely to be ‘production’ than ‘lifestyle’ landholders.

Figure 6: Actively managed native vegetation in the past three years by landholder profile



Note: A score of one (1) indicates all attributes described on the left of the table. A score of seven (7) indicates landholders with all attributes described on the right of the table.

Source: EBC (2019).

Table 31 indicates that the majority of landholders managed native vegetation through weed control (64%) and grazing management (56%).

Table 31: “What activities did you undertake to manage native vegetation on your property?”

Response	Count	Percent
Weed control	45	64.3
Grazing management	39	55.7
Pest animal control	33	47.1
Fencing for stock exclusion	25	35.7
Regeneration of native plants	20	28.6
Revegetation of native plants	17	24.3
Total respondents	70	100.0

Note: Percentages based on only those respondents who reported they managed native vegetation in the last three years (Question 23)
This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

Table 32 shows that three quarters of all landholders (74%) with native vegetation on their property also purposefully retained logs or fallen timber for its value to native vegetation and fauna.

Table 32: “Do you purposefully retain logs or fallen timber for its value to native vegetation or fauna on your property?”

Response	Count	Percent
Yes	86	73.5
No	31	26.5
Total respondents	117	100.0

Note: Percentages based on only those respondents who reported native vegetation on their property (Question 18)

Source: EBC (2019).

While a third of all landholders were currently encouraging native vegetation growth (35%) and actively managing weeds within areas of native vegetation (35%); 27% of all landholders were interested in revegetation, including planting native vegetation, seeding and developing wind breaks (Table 33)

Table 33: “In relation to each of the following practices, indicate if you are currently undertaking the practice and are interested in undertaking the practice in the future?”

Response	Count	Percent
Encouraging native vegetation growth		
Currently undertaking the practice	52	34.7
Interested in undertaking the practice	31	20.7
Not currently undertaking or not interested in undertaking the practice	67	44.7
Total respondents	150	100.0
Actively managing weeds within areas of native vegetation		
Currently undertaking the practice	52	34.7
Interested in undertaking the practice	31	20.7
Not currently undertaking or not interested in undertaking the practice	67	44.7
Total respondents	150	100.0
Revegetation (i.e., planting native vegetation, seeding, wind breaks)		
Currently undertaking the practice	31	22.7
Interested in undertaking the practice	41	27.3
Not currently undertaking or not interested in undertaking the practice	75	50.0
Total respondents	150	100.0
Implementing grazing strategies to encourage native vegetation		
Currently undertaking the practice	43	28.7
Interested in undertaking the practice	23	15.3
Not currently undertaking or not interested in undertaking the practice	84	56.0
Total respondents	150	100.0
Fencing native vegetation and/or paddock trees from stock		
Currently undertaking the practice	29	19.3
Interested in undertaking the practice	21	14.0
Not currently undertaking or not interested in undertaking the practice	100	66.7
Total respondents	150	100.0
Cultural burning and the use of fire as a tool for the management of native vegetation		
Currently undertaking the practice	6	4.0
Interested in undertaking the practice	34	22.7
Not currently undertaking or not interested in undertaking the practice	110	73.3
Total respondents	150	100.0
Changing fertiliser application rates		
Currently undertaking the practice	7	4.7
Interested in undertaking the practice	8	5.3
Not currently undertaking or not interested in undertaking the practice	135	90.0
Total respondents	150	100.0

Note: 'Not currently undertaking or not interested in undertaking the practice' may also indicate that the land management practice was not applicable to the property or the management context (e.g. no vegetation on property, no livestock on property). This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

Goals for improving native vegetation

Forty-five percent of all landholders indicated they had goals to improve or manage native vegetation or habitat areas on their property (Table 34)

Table 34: “Do you have any goals to improve or manage native vegetation or habitat areas on your property?”

Response	Count	Percent
No native vegetation on my property	26	17.4
Yes	67	45.0
No	56	37.6
Total respondents	149	100.0

Source: EBC (2019).

The majority of landholders (64%) indicated their goal was to revegetate identified areas (Table 35)

Table 35: “What are these goals?”

Response	Count	Percent
Revegetate identified areas	39	63.9
Fencing native vegetation	30	49.2
Identify native vegetation	26	42.6
Map native vegetation throughout property	13	21.3
Other goals	10	16.4
Total respondents	61	100.0

Note: Percentages based on only those respondents who reported they had goals to improve or manage native vegetation (Question 48)
Other goals included stop increasing; encourage native vegetation; introduce competitive species; BCT programs; maintain and strengthen; prevent heavy grazing; eliminate weeds; dam and contour banks.
This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

Table 36 shows that 44% of landholders reported ‘medium’ ability to achieve their goals in relation to native vegetation, with an additional 32% indicating their ability was ‘high’.

Table 36: “Would you say your ability to achieve these goals is...?”

Response	Count	Percent
Very low (1)	3	4.8
Low	9	14.3
Medium	28	44.4
High	20	31.7
Very high (5)	3	4.8
Total respondents	67	100.0
Mean score		3.2

Note: Percentages based on only those respondents who reported they had goals to improve or manage native vegetation (Question 48)
Source: EBC (2019).

Landholders who indicated a moderate or lower ability to achieve their goals in relation to native vegetation also indicated this was due to 'poor seasonal or climatic conditions' (59%); 'limited time available to do the work' (56%) or 'limited access to funds to undertake the work' (54%) (Table 37).

Table 37: "Why do you say your ability to achieve these goals is very low to moderate?"

Response	Count	Percent
Poor seasonal or climatic conditions	23	59.0
Limited time available to do the work	22	56.4
Limited access to funds to undertake the work	21	53.8
Lack of labour and help	19	48.7
Lack of machinery, equipment or materials	17	43.6
Don't live on property	14	35.9
Topography of my land	14	35.9
Lack of knowledge	9	23.1
Don't have a plan	7	17.9
My age limits what I can do	7	17.9
Limited support from neighbours	6	15.4
Restricted by regulations or legislation	6	15.4
Limited support from friends and family	5	12.8
I'm not in the best of health	4	10.3
I'm not optimistic I can do the work	4	10.3
Issues I want to address are too large for me	2	5.1
Limited practical skills	2	5.1
Limited support from businesses and contractors	1	2.6
Total respondents	39	100.0

Note: Percentages based on only those respondents who reported their ability to achieve goals was very low, low or moderate (Question 50).

This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

If the barriers identified in Table 37 were removed, the majority of landholders indicated it would be either likely (51%) or very likely (28%) that they would be able to achieve their goals in relation to the management of native vegetation (Table 38).

Table 38: "If the issues you identified in the last question were removed, how likely would it be that you would undertake actions to achieve your goals?"

Response	Count	Percent
Very unlikely (1)	4	10.3
Unlikely	1	2.6
Somewhat likely	3	7.7
Likely	20	51.3
Very likely (5)	11	28.2
Total respondents	39	100.0
Mean score		3.8

Note: Percentages based on only those respondents who reported their ability to achieve goals was very low, low or moderate (Question 50)

Source: EBC (2019).

Birdlife

Eighty-seven percent of landholders indicated they had an interest in native birds on their property (Table 39).

Table 39: “Do you have an interest in the native birds that are on your property?”

Response	Count	Percent
Yes	128	86.5
No	20	13.5
Total respondents	148	100.0

Source: EBC (2019).

Forty-six percent of all landholders indicated they had heard of the Regent Honeyeater or the Swift Parrot (Table 40). Although the percentage of landholders who had heard of each bird were the same, only 40% had heard of both the Regent Honeyeater and Swift Parrot.

Table 40: “Have you heard of these birds?” (Counts and percentage for those who have heard of the bird)

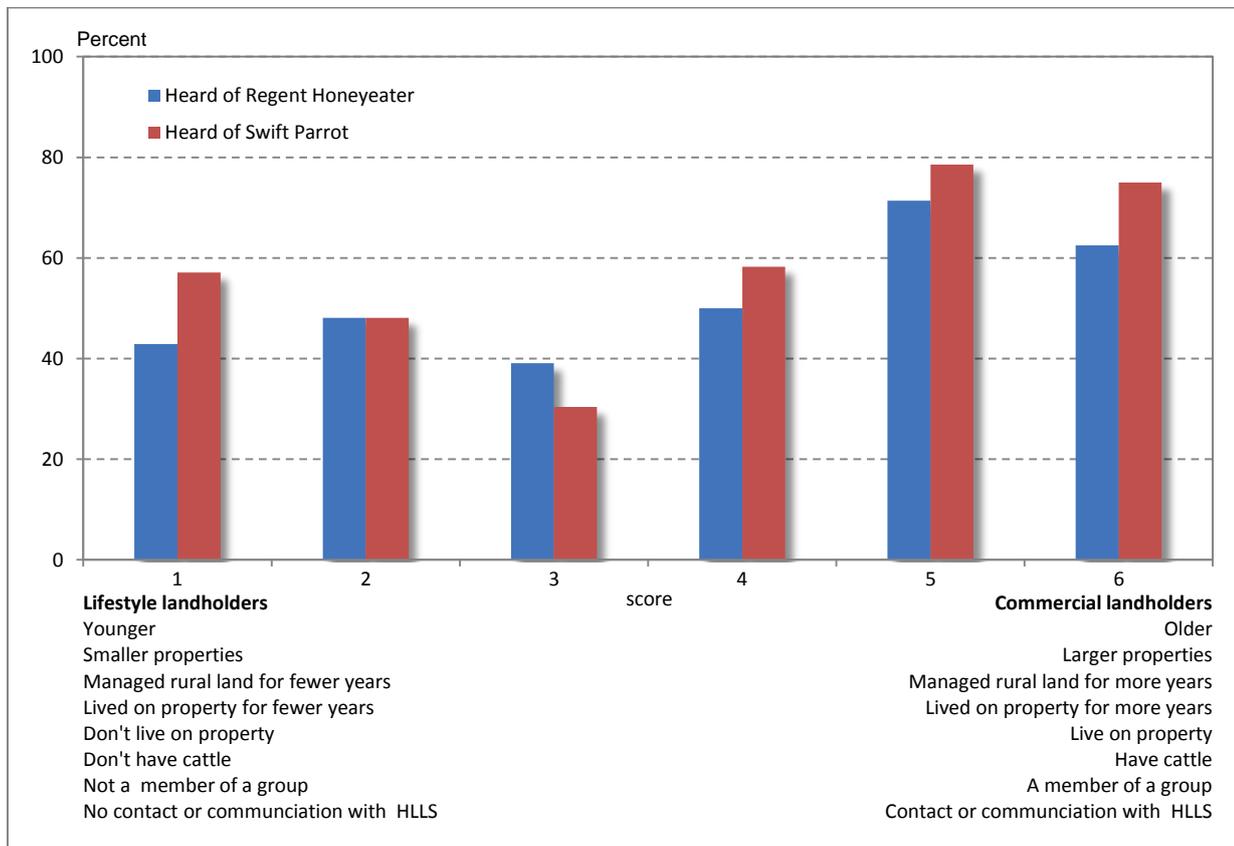
Response	Count	Percent
Regent Honeyeater	69	46.3
Swift Parrot	69	46.3
Total respondents	149	100.0

Note: This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

In addition, Figure 7 shows that ‘production’ landholders were more likely to have heard of the Regent Honeyeater and Swift Parrot when compared to ‘lifestyle’ landholders.

Figure 7: Awareness of Regent Honeyeater and Swift Parrot by landholder profile



Note: A score of one (1) indicates all attributes described on the left of the table. A score of seven (7) indicates landholders with all attributes described on the right of the table.

Source: EBC (2019).

Amongst those landholders who described what they knew of the Regent Honeyeater and Swift Parrot (Table 41), the most common descriptions were that that were an endangered or threatened species (55%) or that they were migratory and that the Swift Parrot in particular migrated from Tasmania (22%).

Table 41: “What do you know about these birds?”

Response	Count	Percent
Endangered or threatened species (inc. critically endangered)	28	54.9
Migratory/Swift Parrot breeds/migrates from Tasmania	11	21.6
Able to visually identify, recognise, have sighted birds	9	17.6
Bird habitat loss or degradation occurring	8	15.7
Rare or limited number	6	11.8
Feeds on native/flowing trees	6	11.8
Knows of interest by other in birds (researchers, grants, field days)	5	9.8
Pollinators	3	5.9
Other	5	9.8
Total respondents	51	100.0

*Note: Percentages based on only those respondents who had heard of either bird (Question 27)
 Other includes: birds help with regeneration of plants and trees; vulnerable due to predation; neither bird sighted here; frequent lower altitudes; Regent Honeyeater a nomad
 This is a multiple response table in which a respondent may be included in multiple rows.*

Source: EBC (2019).

St John's Wort

The questionnaire included questions which focused on the occurrence and management of St John's Wort and what information and assistance landholders had used in managing St John's Wort of their property.

Occurrence of St John's Wort

Half (50%) of all landholders reported that St John's Wort currently occurred on their property (Table 42).

Table 42: "Does St John's Wort currently occur on your property?"

Response	Count	Percent
Yes	75	50.3
No	74	49.7
Total respondents	149	100.0

Source: EBC (2019).

Although 45% of landholders reported St John's Wort to be of minor or no concern (Table 43), 55% indicated it was of moderate or of major concern on their property.

Table 43: "On your property would you say St John's Wort is of...?"

Response	Count	Percent
No concern (1)	4	5.3
Minor concern	30	40.0
Moderate concern	23	30.7
Major concern (4)	18	24.0
Total respondents	75	100.0
Mean score		2.7

Note: Percentages based on only those respondents who reported St John's Wort on their property (Question 30)

Source: EBC (2019).

The three most commonly reported reasons for St John's Wort being of 'moderate' or 'major' concern (Table 44), was that it reduced the value of the property (68%), it impacted on stock health (65%) and it competed with pasture and other plants (55%).

Table 44: "Why would you say St John's Wort is of moderate or major concern?"

Response	Count	Percent
Reduces my property value	27	67.5
Impacts livestock health	26	65.0
Competes with pasture and other plants	22	55.0
Adds vegetable fault to wool	1	2.5
Other reasons	12	30.0
Total respondents	75	100.0

Note: Percentages based on only those respondents who reported St John's Wort of moderate or major concern (Question 31).

Other reasons included: Ability to spread (3); invasive (2); noxious weed; don't want to lose control; hard to control; neighbour complains; difficult to eradicate; costly to control

This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

As shown in Table 45, St John’s Wort was most commonly found in grazing areas (81%), areas of remnant vegetation (43%) and ungrazed areas (38%).

Table 45: “On your property is St John’s Wort located in...”

Response	Count	Percent
Grazing areas	60	81.1
Areas of remnant vegetation	32	43.2
Ungrazed areas	28	37.8
Areas of riparian vegetation	20	27.0
Other areas	3	4.1
Total respondents	74	100.0

Note: Percentages based on only those respondents who reported St John’s Wort on their property (Question 30)

Other areas includes: everywhere (2); woodlands

This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

Management of St John’s Wort

Amongst those landholders with St John’s Wort on their property, 95% had actively managed the weed within the last three years (Table 46).

Table 46: “In the past three years have you or others actively managed St John’s Wort on your property?”

Response	Count	Percent
Yes	71	94.7
No	4	5.3
Total respondents	75	100.0

Note: Percentages based on only those respondents who reported St John’s Wort on their property (Question 30)

Source: EBC (2019).

Ungrazed areas (86%) were the most commonly reported area of properties in which St John’s Wort was managed (Table 47).

Table 47: “In what areas of your property have you managed St John’s Wort?”

Response	Count	Percent
Ungrazed areas	61	85.9
Grazing areas	31	43.7
Areas of riparian vegetation	30	42.3
Areas of remnant vegetation	20	28.2
Other areas	1	1.4
Total respondents	71	100.0

Note: Percentages based on only those respondents who reported they had managed John’s Wort on their property (Question 34)

Other areas included woodlands

This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

Chemicals (97%) and 'removal by hand' (31%) were the two most common methods of control for St John's Wort (Table 48). Removing St John's Wart by hand was never the sole method used, but always used in combination with chemicals.

Table 48: "Which of the following methods have you used to control St John's Wort?"

Response	Count	Percent
Chemicals	69	97.2
Removal by hand	22	31.0
Suppression by grazing sheep	7	9.9
Cultivation such as cropping	3	4.2
Reforestation and tree planting	1	1.4
Other methods	2	2.8
Total respondents	71	100.0

Note: Percentages based on only those respondents who reported they had managed John's Wort on their property (Question 34)
Other methods include: slashing and grazing practices.
This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

Table 49 shows the reasons landholders gave for using specific methods (primarily chemicals) for the control of St John's Wort, including that it was 'cost effective' (65%) or that it had 'limited impact on pastures and native vegetation' (45%).

Table 49: "Why did you use these methods to control St John's Wort?"

Response	Count	Percent
Cost effective	39	65.0
Limited impact on pastures and native vegetation	27	45.0
Topography of the land	26	43.3
Difficult to access land	21	35.0
Limited impact on livestock	21	35.0
Other methods	1	1.7
Total respondents	60	100.0

Note: Percentages based on only those respondents who reported they had managed John's Wort on their property (Question 34)
Other methods include: slashing and grazing practices.
This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

The majority of respondents (60%) indicated the methods they had used for the control of St John's Wort (primarily chemicals) had been 'very successful' (Table 50).

Table 50: "How successful have these methods been in controlling St John's Wort...?"

Response	Count	Percent
No success(1)	2	2.8
Some success	27	37.5
Very successful (3)	43	59.7
Total respondents	72	100.0
Mean score		2.6

Note: Percentages based on only those respondents who reported they had managed John's Wort on their property (Question 34)

Source: EBC (2019).

Information and assistance in the management of St John's Wort

Table 51 shows information in relation to the management of St John's Wort was primarily obtained from 'brochures, pamphlets or other reading materials' (47%) and neighbours (34%).

Table 51: "Where did you get your information or advice about the control and management of St John's Wort?"

Response	Count	Percent
Brochures, pamphlets or other reading materials	33	47.1
Neighbours	24	34.3
State Government agencies and departments	17	24.3
Family and friends	15	21.4
Websites	14	20.0
Stock agents or rural suppliers	14	20.0
Local Government	12	17.1
Producer or environmental groups	9	12.9
Courses I have undertaken	8	11.4
Other sources	9	12.9
Total respondents	70	100.0

Note: Percentages based on only those respondents who reported they had managed John's Wort on their property (Question 34)
Other sources include: own experience (3); contractors (2); Agronomist (2); chemical labels; chemical reps
This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

A third of landholders (31%) who reported they had St John's Wort on their property had sought external help or assistance in relation to its control (Table 52).

Table 52: "Have you used any external help or assistance to control St John's Wort on your property?"

Response	Count	Percent
Yes	22	31.0
No	49	69.0
Total respondents	71	100.0

Note: Percentages based on only those respondents who reported they had managed John's Wort on their property (Question 34)
Source: EBC (2019).

Amongst landholders who had sought assistance in the control of St John's Wort, the majority (55%) had used contractors (Table 53).

Table 53: "What type of assistance have you used?"

Response	Count	Percent
Contractors	12	54.5
Other family members and friends	7	31.8
Neighbours	4	18.2
Landcare or other similar group	1	4.5
Other assistance	3	13.6
Total respondents	22	100.0

Note: Percentages based on only those respondents who reported they had used external assistance to control St John's Wort (Question 40)
Other assistance include: Local Government (2) and biologist.
This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

Other weeds

After responding to questions about St John's Wort, all respondents were asked specific questions about 'other weeds' on their property which included the identification, impact and management of 'other weeds'.

Occurrence of other weeds

Three quarters of landholders (76%) indicated they had weeds other than St John's Wort that were of concern on their property (Table 54).

Table 54: "Do you have other weeds of concern on your property (excluding St John's Wort)?"

Response	Count	Percent
Yes	113	75.8
No	36	24.2
Total respondents	149	100.0

Source: EBC (2019).

The main 'other weeds' of concern are shown in Table 55, with the three most common weeds being Prickly Pear (83%), Blue Heliotrope (33%) and Fireweed (28%).

Table 55: "What are the main weeds of concern on your property?"

Response	Count	Percent
Don't know	4	3.5
Prickly Pear (Tiger Pear)	94	83.2
Blue Heliotrope	37	32.7
Fireweed	32	28.3
Noogoora Burr	27	23.9
African Boxthorn	24	21.2
Blackberry	12	10.6
Sweet Briar	10	8.8
Tree of Heaven	8	7.1
African Olive	4	3.5
Green Cestrum	2	1.8
Willows	2	1.8
African Lovegrass	1	0.9
Coolatai Grass	1	0.9
Other weeds	46	40.7
Bathurst Burr	12	10.6
Saffron Thistle	5	4.4
Sifton Bush	3	2.7
Rock Fern	3	2.7
Thistle	3	2.7
St Barnaby's Thistle	2	1.8
Spiny Burrgrass	2	1.8
Paterson's Curse	2	1.8
Other weeds (frequency of one)	14	12.4
Total respondents	113	100.0

Note: Percentages based on only those respondents who reported they had other weeds on their property (Question 42)
 Other weeds include Galvanised Burr; Star Thistle; Galenia; Bamboo Grass; Jerusalem Cherry; Cooch Grass; Rope Pear; Spring Burr Grass; Kerosene; Inkweed; Horehound; Cotton Bush; Khaki Weed; Rhus Tree
 This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

The majority of landholders (51%) indicated that ‘other weeds’ were found on less than 10% of their property (Table 56).

Table 56: “In an average season (prior to drought) what percentage of your property would contain weeds?”

Response	Count	Percent
Less than 10%	56	51.4
Between 11% and 30%	32	29.4
Between 31% and 60%	14	12.8
Between 61% and 90%	7	6.4
Over 91%	0	0.0
Total respondents	113	100.0

Note: Percentages based on only those respondents who reported they had other weeds on their property (Question 42)
 Source: EBC (2019).

Impact of other weeds

The primary impacts associated with property weeds (Table 57) were that they ‘competed with native plants and vegetation’ (53%); the cost of weed control (44%); the loss of desirable pasture plants (37%) and that they were ‘harmful to livestock’ (32%).

Table 57: “What are the main impacts weeds are having on your property?”

Response	Count	Percent
No impacts	17	15.3
Don't know	13	11.7
Compete with native plants and vegetation	59	53.2
Cost of weed control	49	44.1
Loss of desirable pasture plants	41	36.9
Harmful to livestock health	35	31.5
Provide habitat for feral animals	18	16.2
Contamination of products (i.e., wool)	11	9.9
Damage waterways	7	6.3
Change in water quality	2	1.8
Change in fire regimes	1	0.9
Other impacts	8	7.2
Total respondents	113	100.0

Note: Percentages based on only those respondents who reported they had other weeds on their property (Question 42)
 Other impacts included loss of production (2); impact on property value; danger of spreading(2); reduces access to areas; damage vehicle tyres; visual impact; stress of controlling weeds.
 This is a multiple response table in which a respondent may be included in multiple rows.
 Source: EBC (2019).

Management of other weeds

Seventy percent of landholders indicated they had been successful in managing weeds on their property (Table 58).

Table 58: “Have you been able to successfully manage weeds on your property?”

Response	Count	Percent
Yes	78	69.6
No	34	30.4
Total respondents	112	100.0

Note: Percentages based on only those respondents who reported they had other weeds on their property (Question 42)
 Source: EBC (2019)

The main reasons landholders gave for the successful management of weeds (Table 59) included herbicide control (87%) and 'manual removal by hand' (51%).

On the other hand, the reasons given for the unsuccessful management of weeds (Table 59) included the 'lack of money' (55%), the 'lack of labour and help' (46%), that the landholder didn't live on the property (39%); and that the age of the landholder limited what they could do (39%).

Table 59: Reasons for successful and unsuccessful management of weeds

Response	Count	Percent
Reasons for successful management		
Herbicide control	68	87.2
Manual removal by hand	40	51.3
Slashing or mowing	25	32.1
Used livestock to control weeds	19	24.4
Changed grazing practices	16	20.5
Burning	12	15.4
Cultivation, ploughing or tilling	7	9.0
Other reasons	3	3.8
Total respondents	78	100.0
Reasons for unsuccessful management		
Lack of money	18	54.5
Lack of labour and help	15	45.5
Don't live on property	13	39.4
My age limits what I can do	13	39.4
Lack of time	11	33.3
Difficult or hard to access area	10	30.3
Too many weeds or too big a problem	10	30.3
Lack of machinery, equipment or materials	9	27.3
Poor seasonal conditions	8	24.2
Topography of my land	8	24.2
Lack of knowledge	7	21.2
I'm not in the best of health	6	18.2
Condition can't be managed	3	9.1
No need to address weeds	3	9.1
Restricted by regulations or legislation	2	6.1
Other reasons	2	6.1
Total respondents	33	100.0

Note: Percentages based on only those respondents who reported they had other weeds on their property (Question 42)
 Other reasons for successful management included: biological control (2); stopped logging.
 Other reasons for unsuccessful management included: herbicide not effective; kangaroos transport seed to property.
 This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

Engagement and capacity building

The two most commonly reported sources of information about land management included 'neighbours and other landholders' (52%) and 'factsheets, books, magazines or guides' (49%).

Table 60: "Where do you usually get your information about land management?"

Response	Count	Percent
Neighbours and other landholders	74	52.1
Fact sheets, books, magazines or guides	70	49.3
Field days or workshops	60	42.3
Hunter Local Land Services	60	42.3
Websites (Google searches)	55	38.7
Family and friends	35	24.6
Farm consultants (i.e., agronomists)	28	19.7
Scientific research or research organisations	20	14.1
Trial or demonstration sites	19	13.4
Producer, conservation or community groups	18	12.7
Stock and station agents	17	12.0
Local Government	12	8.5
Other Government agencies/departments	11	7.7
Other sources	13	9.2
Total respondents	142	100.0

Note: Other sources included: Own experience(4); my education(2) ; local trends; best practice methods; grants; pasture improvement; Black Pine management; educators; Central West LLS; RCS; KLR Marketing; contractors; weed inspector; read widely. This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019).

Table 61 shows that 16% of landholders were members of a local industry, producer or conservation group.

Table 61: "Are you a member of a local industry, producer or conservation group? For example. Landcare, conservation volunteers, pest animal control or best practice group?"

Response	Count	Percent
Yes	24	16.1
No	125	83.9
Total respondents	149	100.0

Source: EBC (2019)

Most commonly, landholders indicated they were members of Landcare, the Goulburn River Wild Dog Association and the Upper Hunter Sustainable Farming Group (Table 62).

Table 62: "What is the name of the group in which you are a member?"

Response	Count	Percent
Landcare (nonspecific)	6	25.0
Goulburn River Wild Dog Association	5	20.8
Upper Hunter Sustainable Farming Group Inc.	5	20.8
NSW Farmers	4	16.6
Bred Well Fed Well	2	8.3
Merriwa Landcare	2	8.3
Other groups (frequency of one)	11	45.8
Total respondents	24	100.0

Note: Other groups included Birdlife Australia; Cassilis grass growers; conservation agriculture group; Grasslands Society of NSW; Merriwa P&C Assoc; Merriwa/Cassilis/Coolah grazing group; National Parks Assoc; NSW Bird Atlassers; Talbrager Landcare; Wild dog meetings; Wyong Wild dog. This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019)

In relation to activities undertaken by Hunter Local Land Services (Table 63), the majority of landholders indicated they had heard of field days (59%), demonstration days (57%) and the Hunter Local Land Services website (55%).

Table 63: “Have you heard of any of the following activities undertaken by Hunter Local Land Services?”

Response	Count	Percent
Field days	63	58.9
Demonstration days	61	57.0
Hunter Local Land Services website	59	55.1
Factsheets	49	45.8
Workshops	35	32.7
Publications	32	29.9
Incentive programs	22	20.6
Regional outlook newsletter	21	19.6
Total respondents	107	100.0

Note: This is a multiple response table in which a respondent may be included in multiple rows.

Source: EBC (2019)

Fifty-five percent of all landholders indicated they had contact or communication with Hunter Local Land Services in the last three years (Table 64).

Table 64: “Have you had any contact or communication with Hunter Local Land Services in the last three years?”

Response	Count	Percent
Yes	82	55.4
No	66	44.6
Total respondents	148	100.0

Source: EBC (2019)

Table 65 indicates that across all landholders, 16% had previously applied to Hunter Local Land Services for incentives or funding to improve river, native vegetation or pasture health.

Table 65: “Have you previously applied for incentives or funding to improve river, native vegetation or pasture health from Hunter Local Land Services?”

Response	Count	Percent
Yes	24	15.6
No	124	84.4
Total respondents	148	100.0

Source: EBC (2019)

Of those landholders who had applied for incentives or funding, Table 66 shows that 75% were successful in obtaining incentives or funding from Hunter Local Land Services.

Table 66: “Were you successful in obtaining incentives or funding from Hunter Local Land Services?”

Response	Count	Percent
Yes	18	75.0
No	6	25.0
Total respondents	24	100.0

Note: Percentages based on only those respondents who reported they applied for incentives or funding from Hunter Local Land Services (Q63)

Source: EBC (2019)

Appendix A:
Landholder questionnaire

Benchmark Survey Box-Gum Grassy Woodland - Upper Hunter

Background: For Hunter Local Land Services (HLLS) to gain a better understanding and to benchmark levels of knowledge, beliefs and attitudes of land managers in relation to Box-Gum Grassy Woodland vegetation community. The results of the survey will be used to tailor HLLS's overall approach to landholder engagement for a number of corresponding projects located on the Merriwa plateau. Survey results will also be used as a benchmark to evaluate HLLS's impact and effectiveness in engaging land managers, improving capacity and knowledge levels and implementation of on-ground works within the focus area.

Approach: The project is being undertaken primarily through a mail and web based survey of landholders within the target area conducted by Dr. Mark Fenton (EBC). An analysis will be undertaken of all returned surveys with the focus of the analysis being on providing relevant information to HLLS with regards to capacity building, landholder engagement and engagement through on ground works.

This questionnaire may also be completed online at:

<http://survey.ebc.net.au/s3/Box-Gum>

****Please note that if you are using the NBN Skymuster satellite service the questionnaire may not be able to be viewed online.****

Questionnaire Number: _____

(This number is used to identify which landholders have completed the questionnaire and which landholders we need to send a reminder letter to)

Identification and awareness

1. Have you heard of Box-Gum Grassy Woodland?

Yes

No → Go to Question 5

2. Are you able to identify Box-Gum Grassy Woodland when you see it?

Yes

No → Go to Question 5

3. Which of the following are you able to identify when you see it? (You may tick more than one box)

None of these specifically, or

Blakely's Red Gum

Grey Box

Yellow Box

White Box

Native grass pastures

4. What are the major characteristics that you use to identify Box-Gum Grassy Woodland?

Don't know

1. _____

2. _____

3. _____

5. The four pictures below show examples of Box-Gum Grassy Woodland dominated by White box, Yellow box, Blakely's Red Gum and Grey Box.

Do you have Box-Gum Grassy Woodland on your property?

Yes

No → Go to Question 11



White Box



Yellow Box



Blakely's Red Gum



Grey Box

6. What do you estimate is the total area of Box-Gum Grassy Woodland on your property?

_____ Acres or

_____ Hectares

7. Do you run livestock on areas of Box-Gum Grassy Woodland?

Yes

No

8. The following activities and processes have the potential to threaten Box-Gum Grassy Woodland.

In the past three years which of the following do you think have influenced the condition of Box-Gum Grassy Woodland on your property? *(You may tick more than one box)*

Potential threats	Influenced the condition of Box-Gum Grassy Woodland
1. Activities of pest animals	<input type="checkbox"/>
2. An increase in the frequency of fire through areas of woodland	<input type="checkbox"/>
3. Collection of firewood from areas of woodland	<input type="checkbox"/>
4. Dryland salinity	<input type="checkbox"/>
5. Livestock selectively and overgrazing the more palatable grasses and species	<input type="checkbox"/>
6. Loss of connectivity between separate areas of woodland	<input type="checkbox"/>
7. Mowing or slashing grassland in woodland areas	<input type="checkbox"/>
8. Other animals grazing (inc. Kangaroos and rabbits) which increase grazing pressure and prevent regeneration of native trees and shrubs and facilitate the spread of weeds	<input type="checkbox"/>
9. Presence of weeds including perennial and annual grasses and woody weeds	<input type="checkbox"/>
10. Soil acidification from agricultural activities	<input type="checkbox"/>
11. Soil compaction by livestock	<input type="checkbox"/>
12. Soil compaction by vehicles or farm machinery	<input type="checkbox"/>
13. Soil nutrients from fertiliser applications including runoff from other paddocks	<input type="checkbox"/>
14. The clearing of woodland for routine agricultural management activities	<input type="checkbox"/>
15. The use of herbicides and pesticides to control weeds and agricultural insect pests	<input type="checkbox"/>
16. 'Tidying-up' or the removal of standing dead timber, fallen logs, rock or litter	<input type="checkbox"/>
17. Trampling of vegetation by livestock	<input type="checkbox"/>

9. Have you contacted any organisation in relation to the management of Box-Gum Grassy Woodland on your property?

Yes

No → *Go to Question 11*

10. Who have you contacted? (You may tick more than one box)

- Australian Wildlife Conservancy
- Landcare
- Local Land Services (Sustainable Land Management)
- NSW Biodiversity Conservation Trust
- NSW Department of Agriculture
- Trust for Nature

Other _____

Property characteristics

11. How large is your property?

_____ Acres **or**

_____ Hectares

12. Do you run livestock on your property?

- Yes
- No → Go to Question 15

13. What type of livestock do you have? (You may tick more than one box)

- Cattle
- Horses
- Sheep

Other _____

14. What type of grazing strategies are you using on your property? (You may tick more than one box)

- Cell grazing
- Rotational grazing
- Mob stocking
- Set or fixed stocking
- Rational grazing
- Tactical grazing

Other _____

15. Do you have a conservation agreement on your property?

- Yes → Go to Question 17
- No

16. Would you be interested in a Conservation agreement on your property?

- Yes
- No
- Maybe

**Values of all native vegetation and fauna on your property
(Including any Box-Gum Grassy Woodland)**

17. How would you define native vegetation?

18. Do you have any areas of native vegetation on your property?

- Yes
- No → Go to Question 26

19. If you were to judge the condition of native vegetation on your property now and compare it to what it was five years ago, would you say it was...?

- Much better now
- Somewhat better now
- No different → Go to Question 21
- Somewhat worse now
- Much worse now

- Don't know → Go to Question 21

20. What do you think has caused the change in the condition of native vegetation?

21. Do you think native vegetation is important on your property?

- Yes
- No → Go to Question 23

22. Why do you think native vegetation is important on your property?
(You may tick more than one box)

- | | |
|-------------------------------------------------------------------|------------------------------------------------------------------|
| <input type="checkbox"/> Benefits adjoining crops or pasture | <input type="checkbox"/> Provides a habitat for native animals |
| <input type="checkbox"/> Benefits for livestock production | <input type="checkbox"/> Increases agricultural production |
| <input type="checkbox"/> Contributes to the beauty of my property | <input type="checkbox"/> Provides timber for firewood or fencing |
| <input type="checkbox"/> Controls erosion | <input type="checkbox"/> Reduces land degradation |
| <input type="checkbox"/> Improves water quality or availability | <input type="checkbox"/> Reduces salinity |
| <input type="checkbox"/> Provides shelter for livestock | <input type="checkbox"/> Stores carbon |

Other _____

23. In the past three years have you actively managed native vegetation on your property?

Yes

No → Go to Question 25

24. What activities did you undertake to manage native vegetation on your property?
(You may tick more than one box)

Fencing for stock exclusion

Regeneration of native plants

Grazing management

Revegetation of native plants

Pest animal control

Weed control

Other _____

25. Do you purposefully retain logs or fallen timber for its value to native vegetation or fauna on your property?

Yes

No

26. Do you have an interest in the native birds that are on your property?

Yes

No

27. Have you heard of these birds? (You may tick more than one box)

Regent Honeyeater

Swift Parrot

Have not heard of these birds → Go to Question 29

28. What do you know about these birds?

29. Do you have a good understanding of the following?
(You may tick more than one box or leave all blank)

Ecosystem services

Pollinators

Integrated pest management

St John's Wort

30. Does St John's Wort currently occur on your property?

Yes

No → Go to Question 42

31. On your property would you say St John's Wort is of...?

No concern → Go to Question 33

Minor concern → Go to Question 33

Moderate concern

Major concern

32. Why would you say St John's Wort is of moderate or major concern?

(You may tick more than one box)

Adds vegetable fault to wool

Impacts livestock health

Competes with pastures and other plants

Reduces my property value

Other reason _____

33. On your property is St John's Wort located in... *(You may tick more than one box)*

Areas of remnant native vegetation

Grazing areas

Areas of riparian vegetation

Ungrazed areas

Other areas _____

34. In the past three years have you or others actively managed St John's Wort on your property?

Yes

No → Go to Question 42

35. In what areas on your property have you managed St John's Wort?

(You may tick more than one box)

Areas of remnant native vegetation

Grazing areas

Areas of riparian vegetation

Ungrazed areas

Other areas _____

36. Which of the following methods have you used to control St John's Wort?

(You may tick more than one box)

- | | |
|----------------------------------------------------------|-------------------------------------------------------|
| <input type="checkbox"/> Chemicals | <input type="checkbox"/> Removal by hand |
| <input type="checkbox"/> Cultivation such as cropping | <input type="checkbox"/> Suppression by grazing sheep |
| <input type="checkbox"/> Reforestation and tree planting | |

Other methods _____

37. Why did you use these methods to control St John's Wort? (You may tick more than one box)

- | | |
|------------------------------------------------------|---------------------------------------------------------------------------|
| <input type="checkbox"/> Cost effective | <input type="checkbox"/> Limited impact on pastures and native vegetation |
| <input type="checkbox"/> Difficult to access land | <input type="checkbox"/> Topography of the land |
| <input type="checkbox"/> Limited impact on livestock | |

Other reasons _____

38. How successful have these methods been in controlling St John's Wort?

- No success
 Some success
 Very successful

39. Where did you get your information or advice about the control and management of St John's Wort? (You may tick more than one box)

- | | |
|--------------------------------------------------------------------------|--------------------------------------------------------------------|
| <input type="checkbox"/> Brochures, pamphlets or other reading materials | <input type="checkbox"/> Producer or environmental groups |
| <input type="checkbox"/> Courses I have undertaken | <input type="checkbox"/> State Government agencies and departments |
| <input type="checkbox"/> Family and friends | <input type="checkbox"/> Stock agents or rural suppliers |
| <input type="checkbox"/> Local Government | <input type="checkbox"/> Neighbours |
| <input type="checkbox"/> Websites | |

Other sources _____

40. Have you used any external help or assistance to control St John's Wort of your property?

- Yes
 No → Go to Question 42

41. What type of assistance have you used?

- | | |
|----------------------------------------------------------|-----------------------------------------------------------|
| <input type="checkbox"/> Contractors | <input type="checkbox"/> Neighbours |
| <input type="checkbox"/> Landcare or other similar group | <input type="checkbox"/> Other family members and friends |

Other _____

Other weeds (excluding St John's Wort)

42. Do you have other weeds of concern on your property (excluding St John's Wort)?

Yes

No → Go to Question 47

43. What are the main weeds of concern on your property (You may tick more than one box)?

Don't know

African Boxthorn

African Lovegrass

African Olive

Blackberry

Blue Heliotrope

Coolatai Grass

Fireweed

Green Cestrum

Noogoora Burr

Prickly Pear

Sweet Briar

Tree of Heaven

Willows

Other _____

44. In an average season (prior to drought) what percentage of your property would contain weeds?

Less than 10%

Between 11% and 30%

Between 31% and 60%

Between 61% and 90%

Over 91%

45. What are the main impacts weeds are having on your property? (You may tick more than one box)

No impacts → Go to Question 46

Don't know → Go to Question 46

Change in fire regimes

Change water quality

Compete with native plants and vegetation

Contamination of products (i.e., wool)

Cost of weed control

Damage waterways

Harmful to livestock health

Loss of desirable pasture plants

Provide habitat for feral animals

Other _____

46. Have you been able to *successfully* manage weeds on your property?

Yes...

...The main things I did to manage these weeds were... (You may tick more than one box)

- | | |
|------------------------------------------------------------|----------------------------------------------------------|
| <input type="checkbox"/> Burning | <input type="checkbox"/> Herbicide control |
| <input type="checkbox"/> Changed grazing practices | <input type="checkbox"/> Slashing or mowing |
| <input type="checkbox"/> Cultivation, ploughing or tilling | <input type="checkbox"/> Used livestock to control weeds |
| <input type="checkbox"/> Manual removal by hand | |

Other methods _____

No...

...Why do you think you were unsuccessful at managing these weeds?
(You may tick more than one box)

- | | |
|--------------------------------------------------------------------|-------------------------------------------------------------------|
| <input type="checkbox"/> Condition can't be managed | <input type="checkbox"/> Lack of time |
| <input type="checkbox"/> Difficult or hard to access area | <input type="checkbox"/> My age limits what I can do |
| <input type="checkbox"/> Don't live on the property | <input type="checkbox"/> No need to address weeds |
| <input type="checkbox"/> I'm not in the best of health | <input type="checkbox"/> Poor seasonal conditions |
| <input type="checkbox"/> Lack of knowledge | <input type="checkbox"/> Restricted by regulations or legislation |
| <input type="checkbox"/> Lack of labour and help | <input type="checkbox"/> Too many weeds or too big a problem |
| <input type="checkbox"/> Lack of machinery, equipment or materials | <input type="checkbox"/> Topography of my land |
| <input type="checkbox"/> Lack of money | |

Other reasons _____

Current land management practices

47. In relation to each of the following practices, indicate if you are currently undertaking the practice and are interested in undertaking the practice in the future (otherwise leave blank).

Land management practices	Currently undertaking the practice	Interested in undertaking the practice in the future
1. Revegetation (i.e., planting native vegetation, seeding, wind breaks)	<input type="checkbox"/>	<input type="checkbox"/>
2. Fencing native vegetation and/or paddock trees from stock	<input type="checkbox"/>	<input type="checkbox"/>
3. Encouraging native vegetation regrowth	<input type="checkbox"/>	<input type="checkbox"/>
4. Actively managing weeds within areas of native vegetation	<input type="checkbox"/>	<input type="checkbox"/>
5. Implementing grazing strategies to encourage native vegetation (inc., trees and native grasses)	<input type="checkbox"/>	<input type="checkbox"/>
6. Changing fertiliser application rates	<input type="checkbox"/>	<input type="checkbox"/>
7. Cultural burning and use of fire as a tool for the management of native vegetation	<input type="checkbox"/>	<input type="checkbox"/>

Engagement and capacity building

48. Do you have any goals to improve or manage native vegetation or habitat areas on your property in the next five years?

No native vegetation on my property → Go to Question 53

Yes

No → Go to Question 53

49. What are these goals? (You may tick more than one box)

Identify native vegetation

Fencing native vegetation

Map native vegetation through a property plan

Revegetate identified areas

Other goals _____

50. Would you say your ability to achieve these goals is...?

Very low

Low

Moderate

High → Go to Question 53

Very high → Go to Question 53

51. Why do you say your ability to achieve these goals is very low to moderate?
(You may tick more than one box)

Don't have a plan

Limited access to funds to undertake the work

Don't live on the property

Limited support from businesses or contractors

I'm not in the best of health

Limited support from friends and family

I'm not optimistic I can do the work

Limited support from neighbours

Issues I want to address are too large for me

Limited time available to do the work

Lack of knowledge

My age limits what I can do

Lack of labour and help

Poor seasonal or climatic conditions

Lack of machinery, equipment or materials

Restricted by regulations or legislation

Limited practical skills

Topography of my land

Other _____

52. If the issues you identified in the last question were removed, how likely would it be that you would undertake actions to achieve your goals?

- Very unlikely
- Unlikely
- Somewhat likely
- Likely
- Very likely

53. Are you a member of a local industry, producer or conservation group? For example, Landcare, conservation volunteers, pest animal control or best practice group?

- Yes
- No → Go to Question 55

54. What is the name of the group in which you are a member? (*record the name of the group*)

Group 1 _____

Group 2 _____

Group 3 _____

55. Where do you usually get your information about land management?
(*You may tick more than one box*)

- | | |
|------------------------------------------------------------------|------------------------------------------------------------------------|
| <input type="checkbox"/> Fact sheets, books, magazines or guides | <input type="checkbox"/> Neighbours and other landholders |
| <input type="checkbox"/> Family and friends | <input type="checkbox"/> Other Government agencies/departments |
| <input type="checkbox"/> Farm consultants (i.e., agronomists) | <input type="checkbox"/> Producer, conservation or community groups |
| <input type="checkbox"/> Field days or workshops | <input type="checkbox"/> Scientific research or research organisations |
| <input type="checkbox"/> Hunter Local Land Services | <input type="checkbox"/> Stock and station agents |
| <input type="checkbox"/> Local Government | <input type="checkbox"/> Trial or demonstration sites |
| <input type="checkbox"/> Websites (Google searches) | |

Other _____

56. Are there any other source of information, or suggestions on information you may be interested in receiving in regards to grazing, weed or vegetation management?

1. _____

2. _____

3. _____

57. Have you read the National recovery plan for “White Box - Yellow Box - Blakely’s Red Gum Grassy Woodland and Derived Native Grassland”?
- Yes
 No
58. Did you know that Box Gum Grassy Woodland is listed as a critically endangered ecological community by the Australian Government?
- Yes
 No
59. Did you know Box-Gum Grassy Woodland is listed as an endangered ecological community under the NSW Threatened Species Conservation Act?
- Yes
 No
60. Would you like to learn more about how to better managed Box-Gum Grassy Woodland?
- Yes
 No
61. Have you heard of any of the following activities undertaken by Hunter Local Land Services?
(You may tick more than one box)
- | | |
|-------------------------------------------------------------|------------------------------------------------------|
| <input type="checkbox"/> Demonstration days | <input type="checkbox"/> Incentive programs |
| <input type="checkbox"/> Factsheets | <input type="checkbox"/> Publications |
| <input type="checkbox"/> Field days | <input type="checkbox"/> Regional Outlook newsletter |
| <input type="checkbox"/> Hunter Local Land Services Website | <input type="checkbox"/> Workshops |
62. Have you had any contact or communication with Hunter Local Land Services in the last three years?
- Yes
 No → *Go to Question 65*
63. Have you previously applied for incentives or funding to improve river, native vegetation or pasture health from Hunter Local Land Services?
- Yes
 No → *Go to Question 65*
64. Were you successful in obtaining incentives or funding from Hunter Local Land Services?
- Yes
 No

Landholder characteristics

65. In what year were you born?

66. What is the nearest town to your property?

67. What is your gender?

Male

Female

68. Do you usually live on your property?

Yes

No

69. How many years have you managed rural land?

_____ years

70. How many years have you lived on your current property?

_____ years

Thank you for your time.

Please post the questionnaire in the reply paid envelope