



October 2018

Connecting with Victorian Hunters *Report of findings*

This report was prepared for the Game Management Authority by Australian Survey Research Pty Ltd



Australian Survey Research Group Pty Ltd is accredited under the AS ISO 20252 quality standard applying to market and social research. This research project was carried out in compliance with the AS ISO 20252 quality standard.

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Executive summary

In 2018, the Victorian Game Management Authority (GMA) commissioned Australian Survey Research Group (ASR) to develop, conduct and analyse a survey of Victorian Game Licence holders which focused on communication with licence holders.

This report presents the results of an online survey conducted in June 2018.

ASR invited a total of 32,596 respondents to the survey. The invitation list was based on people aged over 16 years, and who had a valid Victorian Game Licence issued by the GMA. Each survey participant received an invitation email or an SMS containing a unique link to the online survey. The survey was also available through the GMA website.

Sample and response rates

The survey was open from 12 June 2018 to 25 June 2018, that is, approximately two weeks in field. In total, one email invitation was sent to respondents with valid email addresses and one reminder email was sent to those respondents who had not completed after the first week of fieldwork. An SMS invitation was sent to all respondents with a valid mobile phone number and one SMS reminder was sent to those who had not completed after the first week of fieldwork.

The survey was also promoted through the GMA Facebook page.

No 16 year olds answered the survey while a small number (n=23) of 17 year olds did.

The table below outlines the invitations sent, completions and email bounce backs. A total of 3,882 respondents completed the 2018 survey. The sample is representative of the population of Victorian Game Licence holders at the 95% confidence level and ± 1.5 % confidence interval.

Email invitations count	SMS invitation count	Completion count - invitation	Completion count – GMA website	Completion count – total	Bounce-backs count*	Unsubscribe	Response rate %^
18,078	14,518	3,787	95	3,882	3,297	1,629	7.4%

*Bounce-backs are an approximation

^ Response rate calculated by dividing the total completions by the total number of Vic licence holders over 18 years provided to ASR by GMA (n=52,760)

Key findings

Quantitative (rated answers to questions) and qualitative (open ended answer to questions) data for this survey contained consistent themes.

Interaction with GMA

By far, the most common interaction with GMA was obtaining a new licence / licence renewal: 67% of respondents indicated that they did this in the last 12 months. Separately, two-thirds of respondents used the GMA website to find out about game management or game hunting (66%).

Social media and website sources of information

Facebook was the most commonly mentioned social media source of information. The social media groups / communities mentioned regularly included GMA, the Australian Deer Association, Field and Game Australia and the Sporting Shooters Association.

Sixty-six percent of respondents indicated using the GMA website to obtain information about game management and game hunting.

Preferred channels of information

By far the most preferred method of receiving information from the GMA was through *email* (75% of respondents), followed by *in the mail / printed* (34% of respondents).

Most important topics about game hunting

The three most important game hunting issues respondents wanted to know about were changes to laws (66%), knowing where they could hunt (64%) and season dates / time / details (49%).

The clarity of information provided around these topics varied considerably:

- 62% of respondents indicated that information regarding season times / dates / details was *very clear*
- 37% of respondents indicated that information about changes to laws was *very clear*
- 29% of respondents indicated that information regarding where they could hunt was *very clear*.

In explaining why the information provided by GMA was *unclear*, many respondents attributed this to ambiguous information including poorly produced maps, grey areas in the regulations and the untimely release of information.

Main interests in relation to game hunting and game management in Victoria

The majority of respondents wanted to know if they were in a legal hunting location (77%) and wanted to be sure of the laws (64%). This sentiment was reiterated throughout the numeric and open ended answer within the survey: respondents wanted to be **certain** that they were doing the right thing in the right place.

Overall

Many respondents indicated that GMA was doing a good job. Improvements could be made through improved communications and working more collaboratively with licence holders. Respondents wanted to be kept up to date with explicitly clear, frequent and timely communication. This included the use of emails, apps and SMS alerts regarding changes. Access to land was also an important issue for almost a quarter of respondents, although this is outside of the GMA's remit.

Conducting surveys was a good way to interact with licence holders.

Introduction

In 2018, the Victorian Game Management Authority (GMA) commissioned Australian Survey Research Group (ASR) to develop, conduct and analyse a survey of Victorian Game Licence holders which focused on communication with licence holders.

This report presents the results of an online survey conducted in June 2018.

Methodology

Data collection

Soft launch

A soft launch, similar to a pilot test, was conducted from 5 to 8 June 2018. A random sample of 550 respondents were selected and invited to complete the survey prior to the official launch date. The soft launch survey contained one additional question asking respondents to provide feedback about how the survey questions could be improved. The soft launch achieved a response rate of 7.4% and as a result of the soft launch the survey instrument was slightly refined.

Survey deployment

The full survey was open from 12 June 2018 to 25 June 2018, that is, approximately two weeks in field. The web survey was loaded into ASR's proprietary web surveying tool, SurveyManager, and hosted on ASR's internet servers located in a high security data centre in Melbourne's CBD.

GMA provided the participant list to ASR and the list was based on people who were current Victorian Game Licence holders and aged over 16 years ($n=52,760$). Prior to going live with the full survey the GMA sent an email to approximately 17,000 Game Licence holders (licence holder for which the GMA had email addresses recorded) advising them of the survey as well as advertising the survey on its web page and promoting the survey through its Facebook page.

ASR sent an invitation email containing a unique hyperlink to all respondents with valid email addresses ($n=18,078$). ASR tracked the response rate during the fieldwork period and sent one targeted reminder email to non-responders with valid email addresses. Further to this, ASR sent an SMS message to all respondents with a valid Australian mobile phone number containing a unique hyperlink to the survey. Similarly, ASR tracked the response rate and sent one targeted SMS reminder to all non-responders with a valid mobile number.

ASR ensured that respondents with valid contact details only received a maximum of two pieces of communications (other than the notifications on the GMA website and Facebook page) about the survey. All of the email and SMS communications contained an option that allowed respondents to opt out of the survey.

Online website access

Not all Game Licence holders had provided GMA with a valid email address or mobile phone number. Within the population list of 52,760 licence holders (the full list provided by GMA), 20,373 (39%) did not have a valid email address and/or valid mobile phone number.

To ensure all licence holders had an opportunity to answer, the survey was also made available through the GMA website and was promoted through the GMA Facebook page.

Sample and response rates

The survey was open from 12 June 2018 to 25 June 2018, that is, approximately two weeks in field.

The table below outlines the invitations sent, completions and email bounce backs. A total of 3,882 respondents completed the 2018 survey, resulting in a response rate of 7.4%.

Just over 65% of respondents ($n=2,471$) completed the survey on their mobile phone.

Email invitations count	SMS invitation count	Completion count - invitation	Completion count – GMA website	Completion count – total	Bounce-backs count*	Unsubscribe	Response rate %^
18,078	14,518	3,787	95	3,882	3,297	1,629	7.4%

*Bounce-backs are an approximation

^ Response rate calculated by dividing the total completions by the total number of Vic licence holders over 18 years provided to ASR by GMA (n=52,760)

Data analysis

Results were analysed to produce frequency distributions. Various statistical tests including chi square were used to determine any statistical differences between sub-groups (such as licence type, gender, and age groups). All tests are reported at the $p < 0.05$ level (95% confidence level).

Data value labels in charts below 2% and some data labels have been removed or truncated for readability in some charts.

Open ended responses were coded and common themes have been listed in this report. Random sample coding was used for all open ended questions, meaning that for open-ended questions with more than 500 responses, a random selection of approximately 25-50% of responses were coded. Only the most commonly mentioned themes have been included in tables in this report.

Weighting

No weighting was applied to the data.

Confidence level and interval

The sample is statistically representative of the population at the 95% confidence level and the $\pm 1.5\%$ confidence interval (see note below explaining confidence interval and level). This is lower (more rigorous) than an acceptable scientific confidence interval, normally $\pm 5\%$, and the market research acceptable confidence interval of $\pm 10\%$ - this is a great result in terms of survey sample.

The confidence interval (also called margin of error) is the plus-or-minus figure usually reported in newspaper or television opinion poll results. For example, if you use a confidence interval of 4 and 47% percent of your sample picks an answer you can be "sure" that if you had asked the question of the entire relevant population between 43% (47-4) and 51% (47+4) would have picked that answer.

The confidence level tells you how sure you can be. It is expressed as a percentage and represents how often the true percentage of the population who would pick an answer lies within the confidence interval. The 95% confidence level means you can be 95% certain; the 99% confidence level means you can be 99% certain. Most researchers use the 95% confidence level.

Reference: www.surveysystem.com/sscalc.htm

Note about reading the charts and tables in this report

Within the report, data labels in the stacked charts with values less than 2% have been removed for readability. Only values of 2% or higher have been labelled.

The survey was voluntary and only a few questions were made compulsory (required an answer to move on to the next page). This meant that the number of people who answered each question varied throughout the survey. As a result the n count (actual number of answers) varies between answers to questions (charts and tables).

Values in charts may not sum to totals due to rounding.

Response profile

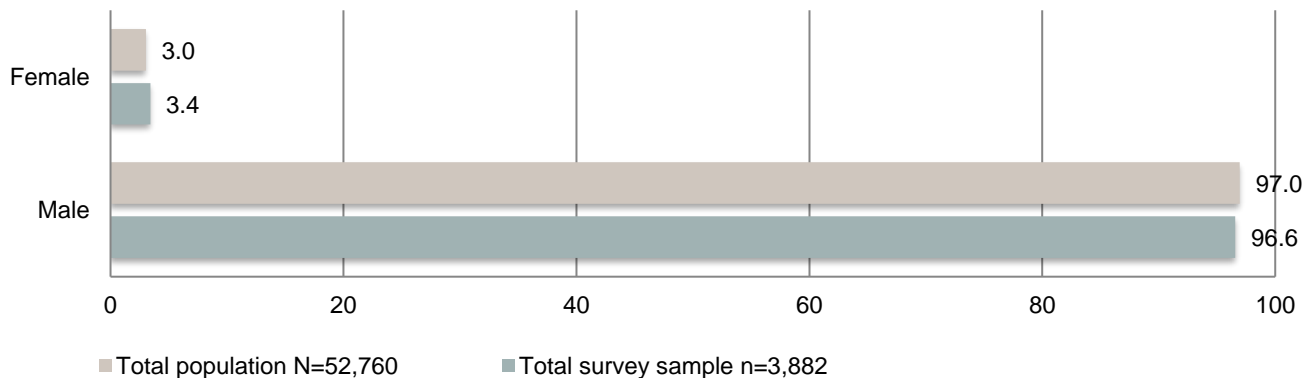
This section outlines the profile of respondents who answered the survey.

General demographics

The vast majority of respondents were male (97%). The survey sample profile closely mirrored the GMA licence holder population in terms of gender. Refer to the chart below. The total population refers to the total population of Game Licence holders.

Gender

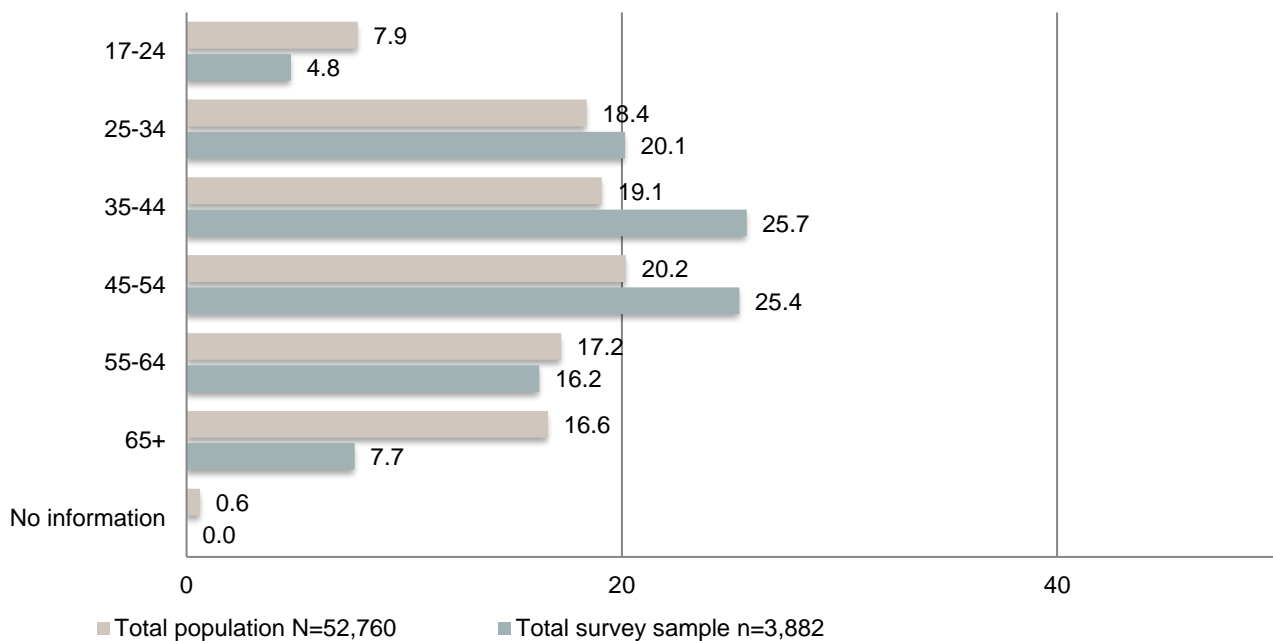
% of respondents



The two largest age groups were 35-44 years and 45-54 years representing 26% and 25% of survey sample respondents respectively. Note that NO 16 year olds participated in the survey, so the youngest age group starts at 17 years. Refer to the chart below.

Age profile

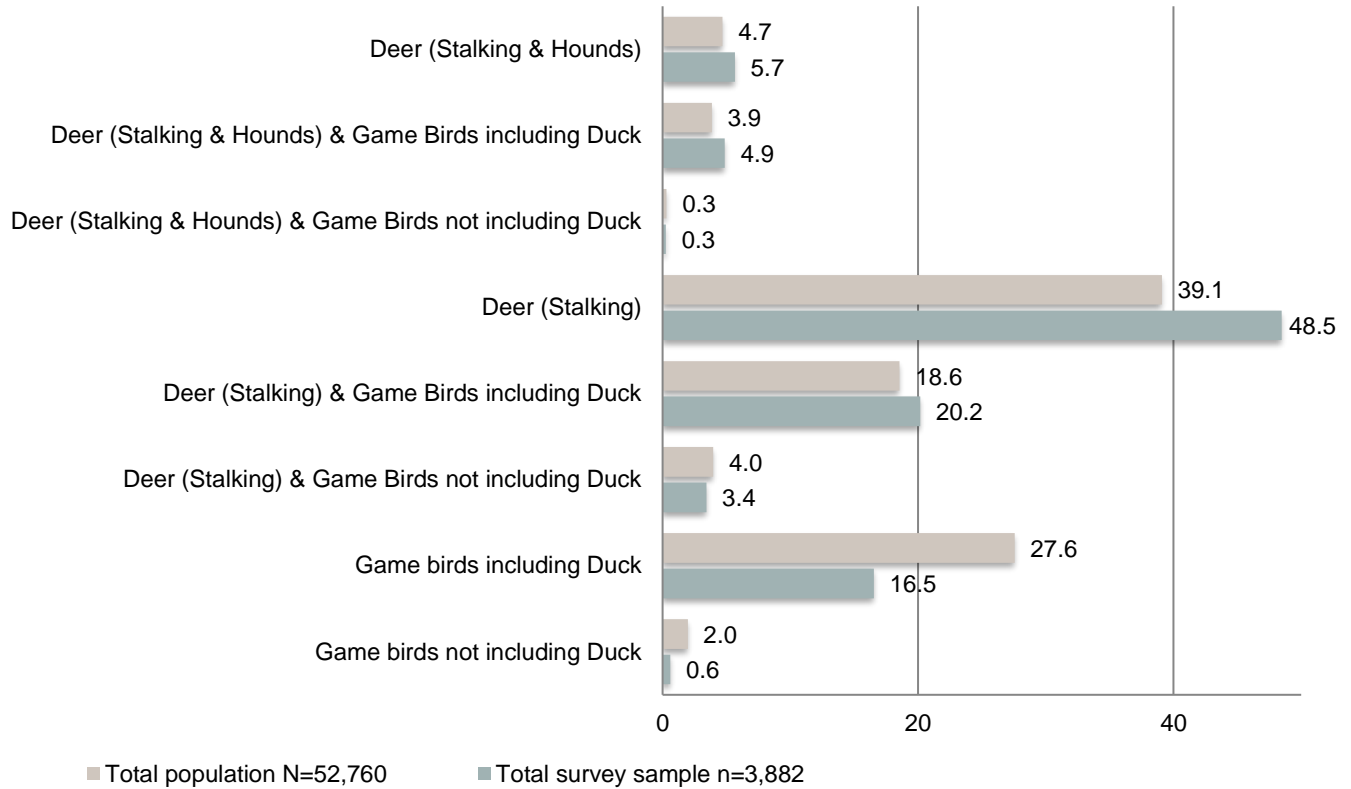
% of respondents



Most commonly, respondents held a deer stalking licence (49%). Refer to the chart below.

Permit sub-type

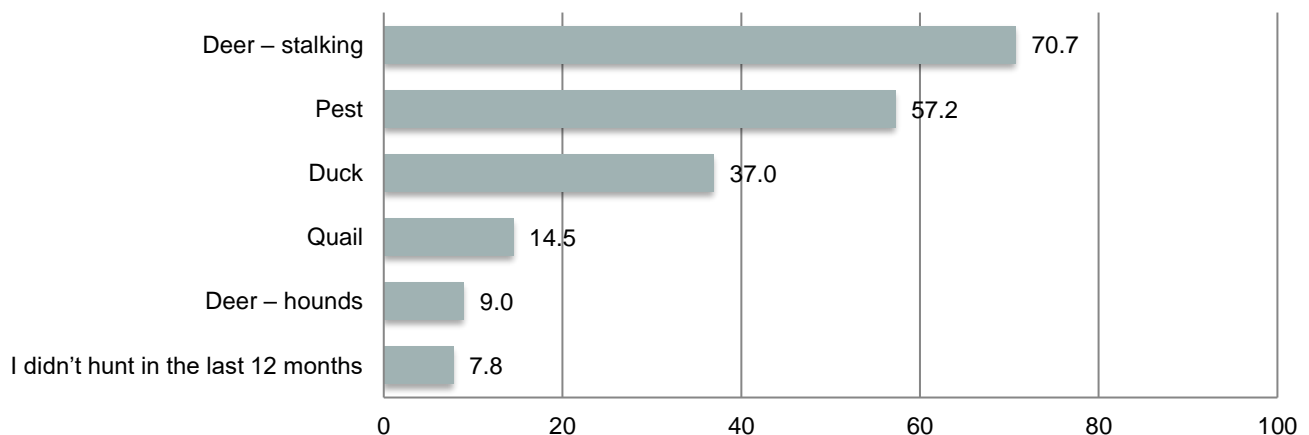
% of respondents



Respondents were asked to indicate what they had hunted for in the previous 12 months. The majority of respondents had hunted for deer – stalking (71%) followed by pest animals (57%). Note that there is no requirement to hold any type of licence in order to hunt pest animals in Victoria. Refer to the chart below.

In the last 12 months, what did you hunt for in Victoria?

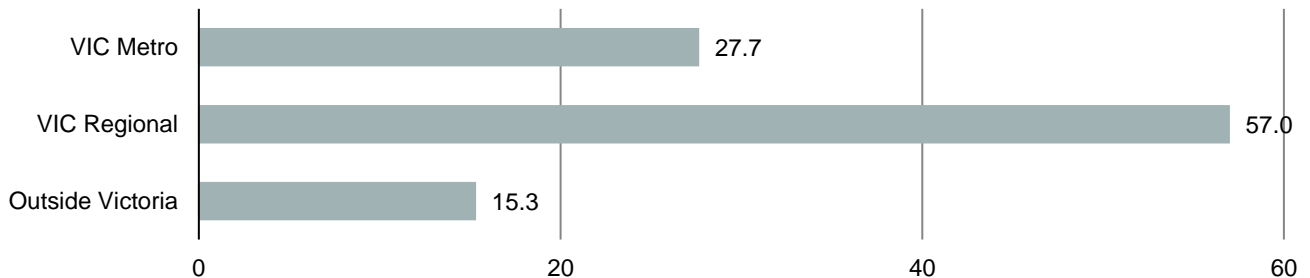
% of respondents, multiple answers allowed so total may be >100%, n=3,843



Fifty-seven percent of respondents resided in **regional** Victoria (57%) and 28% in **metropolitan** Victoria. A small proportion (15% were from outside Victoria). A list of postcodes used to classify metropolitan and regional areas is included Appendix A.

Location- metropolitan or regional Victoria

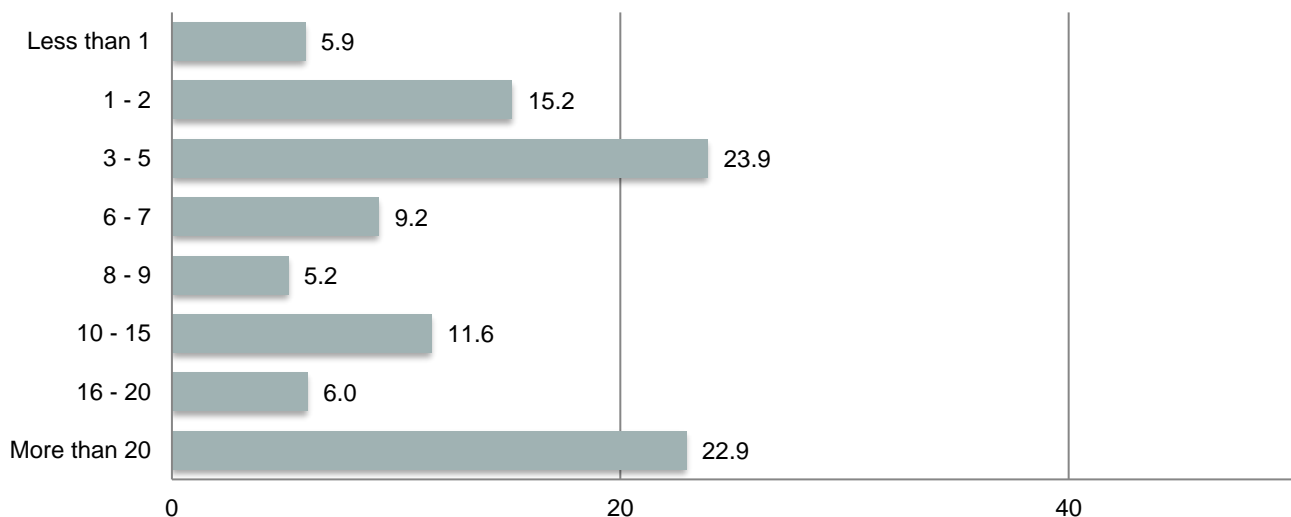
% of respondents, n=3,882



Most commonly respondents had held their game licence for 3-5 years (24%) and more than 20 years (23%). Refer to chart below.

How many years have you had a Victorian Game Licence?

% of respondents, n=3,836

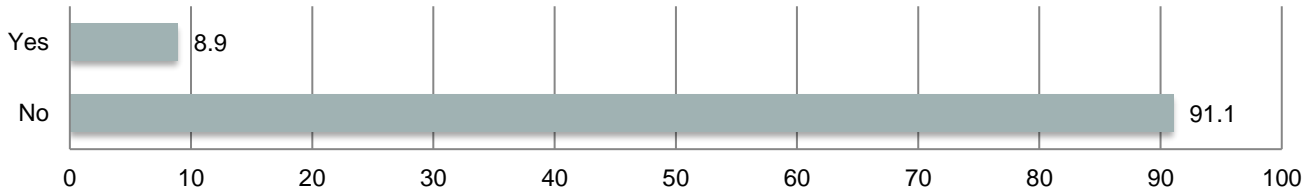


Nine percent of respondents spoke a language other than English at home in the last 12 months. In the 2016 the Australian Bureau of Statistics Census, 21% of Australian reported speaking a language other than English at home, indicated that the GMA licence holder population is less linguistically diverse than the broader population. Refer to the chart below. Of those who indicated that they did speak another language (n=342) the five most commonly mentioned languages were:

1. Greek
2. Italian
3. Arabic (incl Lebanese)
4. Serbian
5. Maltese.

Do you speak a language other than English at home?

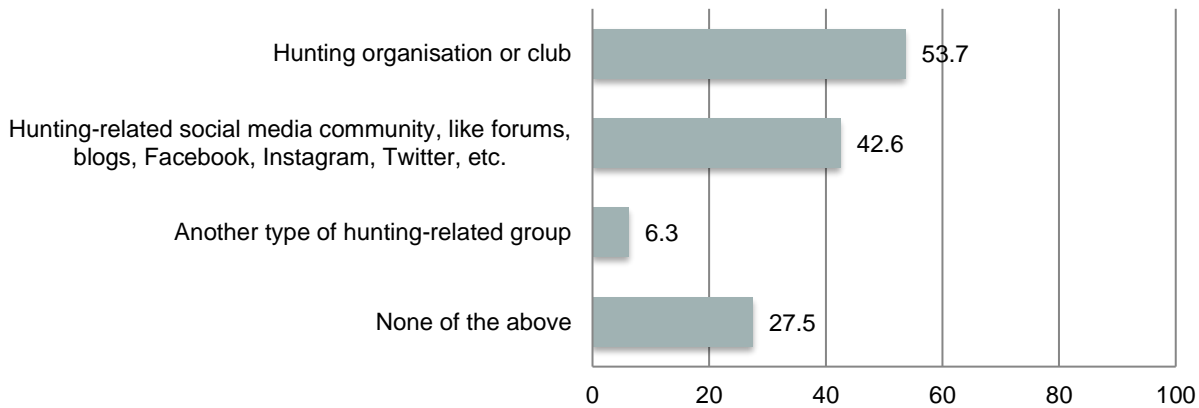
% of respondents, n=3,831



The majority of respondents had some type of hunting related membership with an organisation or club (54%). A large proportion also used social media (43%) while over a quarter (28%) were not members of any hunting related groups. Refer to chart below.

Are you a member of...?

% of respondents, multiple answers allowed so total may be >100%, n=3,775



Respondents who indicated that they were members of another type of hunting related club were asked to specify their response (n=170). The three most common answers included:

- The Sporting Shooters Association (SSAA)
- A hound crew
- A group of friends and/or relatives that hunt together.

Key findings

This section outlines the key findings from the survey. The topics and results are presented in the same order as questions in the online questionnaire. Demographic analysis was conducted for the following groups: gender, age, permit sub-type and licence tenure.

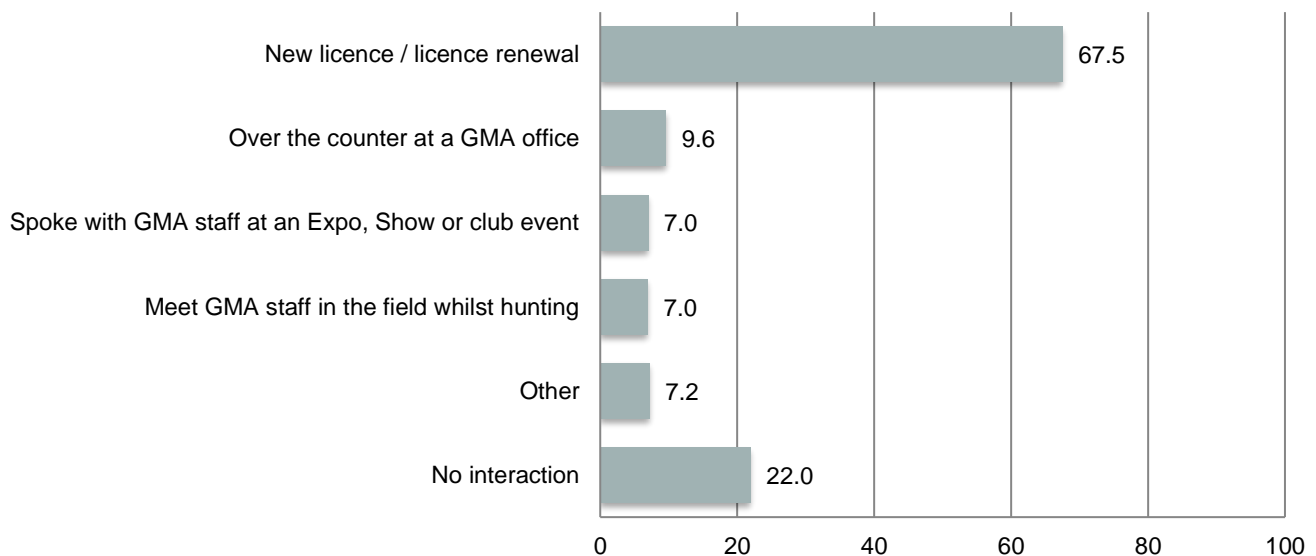
Interaction with GMA

Respondents were asked to specify the different interactions they had with the GMA in the past 12 months. Most commonly, respondents had their licence renewed or were issued a new licence (68%), while approximately 10% of respondents had interacted with GMA over the counter. The five most commonly mentioned *other* types of interactions provided included:

- Over the phone
- Hog deer related interaction
- Update details (change of address etc.)
- Used the GMA website
- Email enquiry.

What types of interactions did you have with GMA in the past 12 months?

% of respondents, multiple answers allowed so total may be >100%, n=3,787

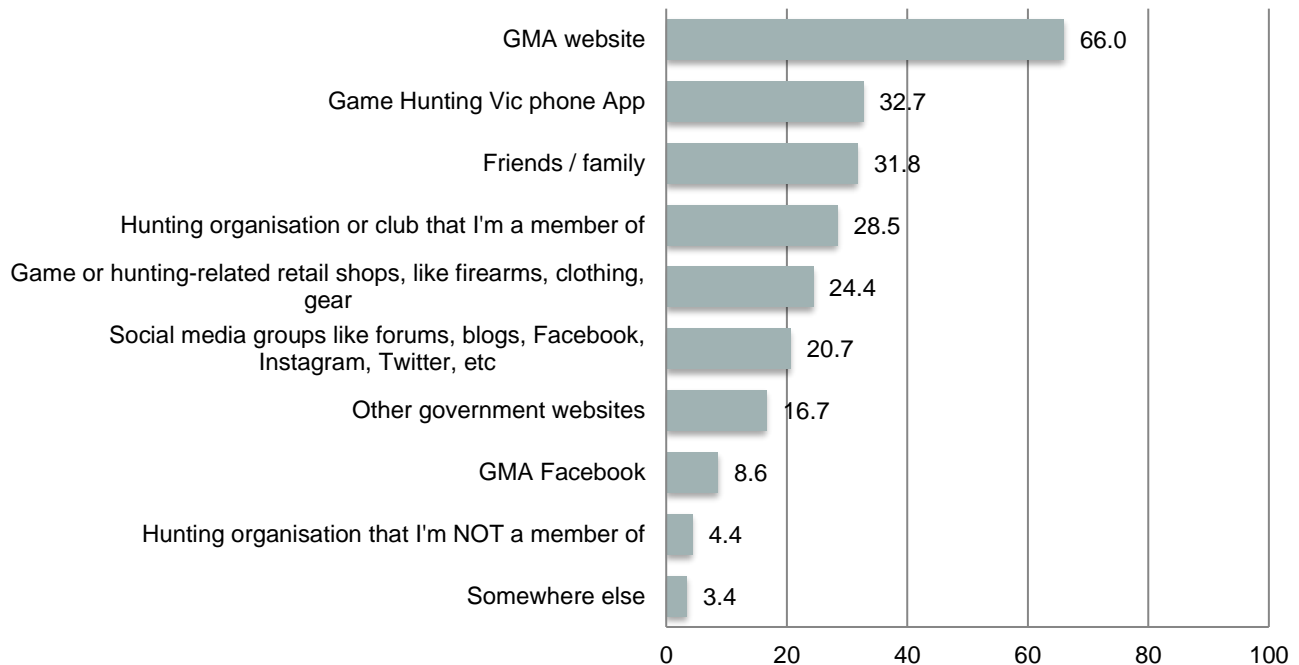


The top five most commonly referenced sources of information regarding game management or game hunting (refer to chart below) were:

1. GMA website (66%)
2. Game Hunting Vic phone app (33%)
3. Friends and family (32%)
4. Hunting organisation or club that I am a member of (29%)
5. Game or hunting related retail shops (24%).

Who or where do you go to find out about game management or game hunting?

% of respondents, multiple answers allowed so total may be >100%, n=3,869



The common themes emerging from the Other mentioned (n=112) sources of information derived from the open ended commentary included:

- Google / internet search
- *Game Hunting in Victoria* GMA handbook
- Magazines
- Victoria Police.

Social media and online sources of information

Social media groups

Respondents were asked which social media groups they frequently interacted with in relation to game management and game hunting. A sample based on 1,768 respondents was used. Multiple answers were allowed so percentages in the table below were based on the total number of mentions. In total, 3,187 mentions were coded.

Respondents were asked to provide the specific name of the groups / page / website that they used, but not all respondents did this. Facebook, Instagram and the GMA (website, app, Facebook page) were the three most commonly used sources of information. Responses were wide and varied and the top 12 most frequently mentioned sources are presented in the table on the next page.

Commonly mentioned Facebook groups have been listed separately where possible. A number of groups appeared regularly in both the social media and websites listed by respondents, these included the GMA, the Australian Deer Association, Field and Game Australia and the Sporting Shooters Association.

Social media groups interacted with (% based on 3,187)	%
Facebook (not further specified and smaller Facebook groups)	31.7
Instagram	8.7
GMA website, Facebook, app	6.2
Hunting Australia Facebook	5.9
Duck related group (including Duck and Quail Hunting Australia Facebook)	4.6
Australian Deer Association (Facebook)	4.6
Sambar hunting related group (Sambar Hunting Victoria, Sambar Stalkers Facebook)	4.5
Field and Game Australia (all branches)	4.3
Deer related group (excluding Sambar Deer specific sites and ADA)	4.2
Google search / internet not further specified	3.8
Sporting Shooters Association of Australia (SSAA)	3.0
Hound hunting group (includes Victorian Hound Hunters Association, Hounds Australia Facebook)	2.3

Websites

Respondents were asked to list the websites they used most frequently to obtain game management or game hunting information. Responses from 2,180 respondents were used. Multiple answers were allowed (up to 5 per person) so the percentages were based on the total number of mentions. In total, 3,472 mentions were coded. The 12 most commonly mentioned websites are presented below. The GMA site was the most popular, making up 48% of all mentions.

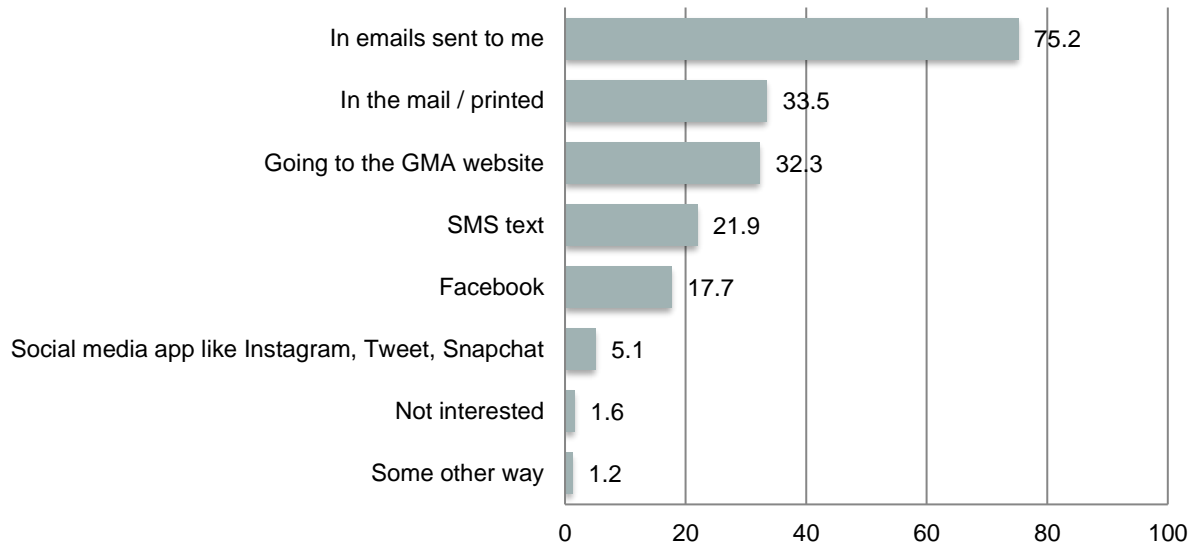
Websites used (% based on 3,472)	%
Game Management Authority (GMA)	48.3
Sporting Shooters Association of Australia (SSAA)	7.2
Field and Game Australia (FGA) (all branches)	7.1
Australian Deer Association (ADA)	5.2
Google / internet search / web not further specified	3.8
DELWP (and its predecessors DEPI / DSE / DNRE)	3.5
Parks Victoria	3.4
Other government websites (example, Victoria Police, Bureau Of Meteorology)	3.1
Game Hunting Victoria Phone App	2.6
NSW government agency (including DPI)	2.6
Facebook	2.3

Preferred channels of information

By far, the most preferred method of receiving information from the GMA was *email* (75%), followed by *mail / printed* (34%). Only 1% of respondents suggested *another* method of distribution, most commonly through the GMA app.

How would you like to receive game management or hunting information from the GMA?

% of respondents, multiple answers allowed so total may be >100%, n=3,868



Most important topics about game hunting

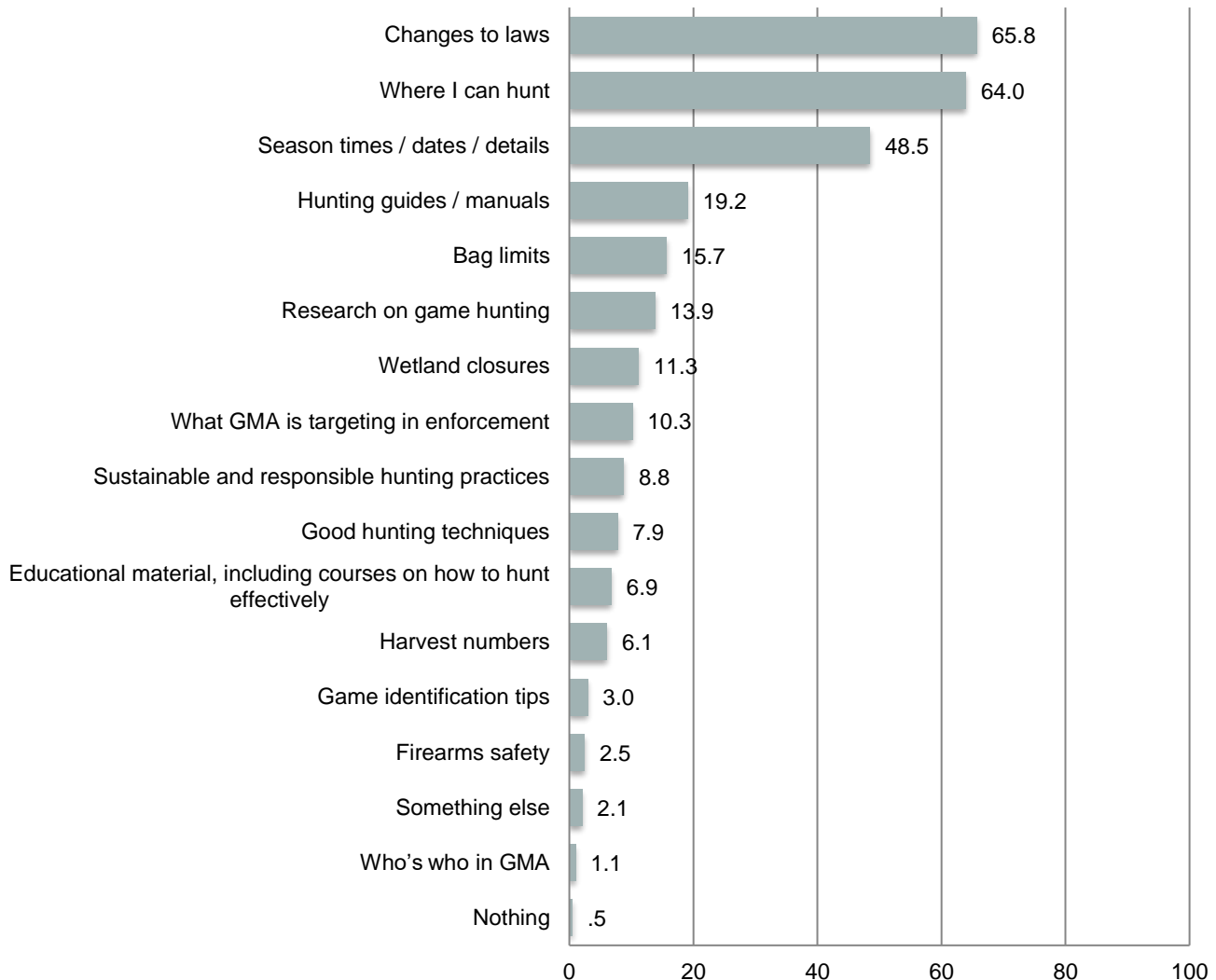
Respondents were presented with a list of 15 important topics, all related to game hunting. They were asked to select the three most important areas to them. Respondents could also list another topic not included in the list. Option randomisation was used so that the list was presented in a different order for different respondents.

The three most important issues respondents want to know about in regards to game hunting were: changes to laws (66%), knowing where they can hunt (64%) and season dates / time / details (49%). Eighty-two respondents commented about other important topics in the open ended responses. Common themes included (refer to the chart below):

- Dealing with protesters
- Knowing where I can hunt
- More engagement between GMA and licenced hunters.

What are the most important topics that you want to know about game hunting?

% of respondents, multiple answers allowed so total may be >100%, n=3,882



Clarity of information

After selecting the three most important topics about game hunting, respondents were asked to rate the clarity of the information received from the GMA for each of the three selected topics. Initial analysis highlighted that, on average, 17% of respondents had no knowledge of any of the topics.

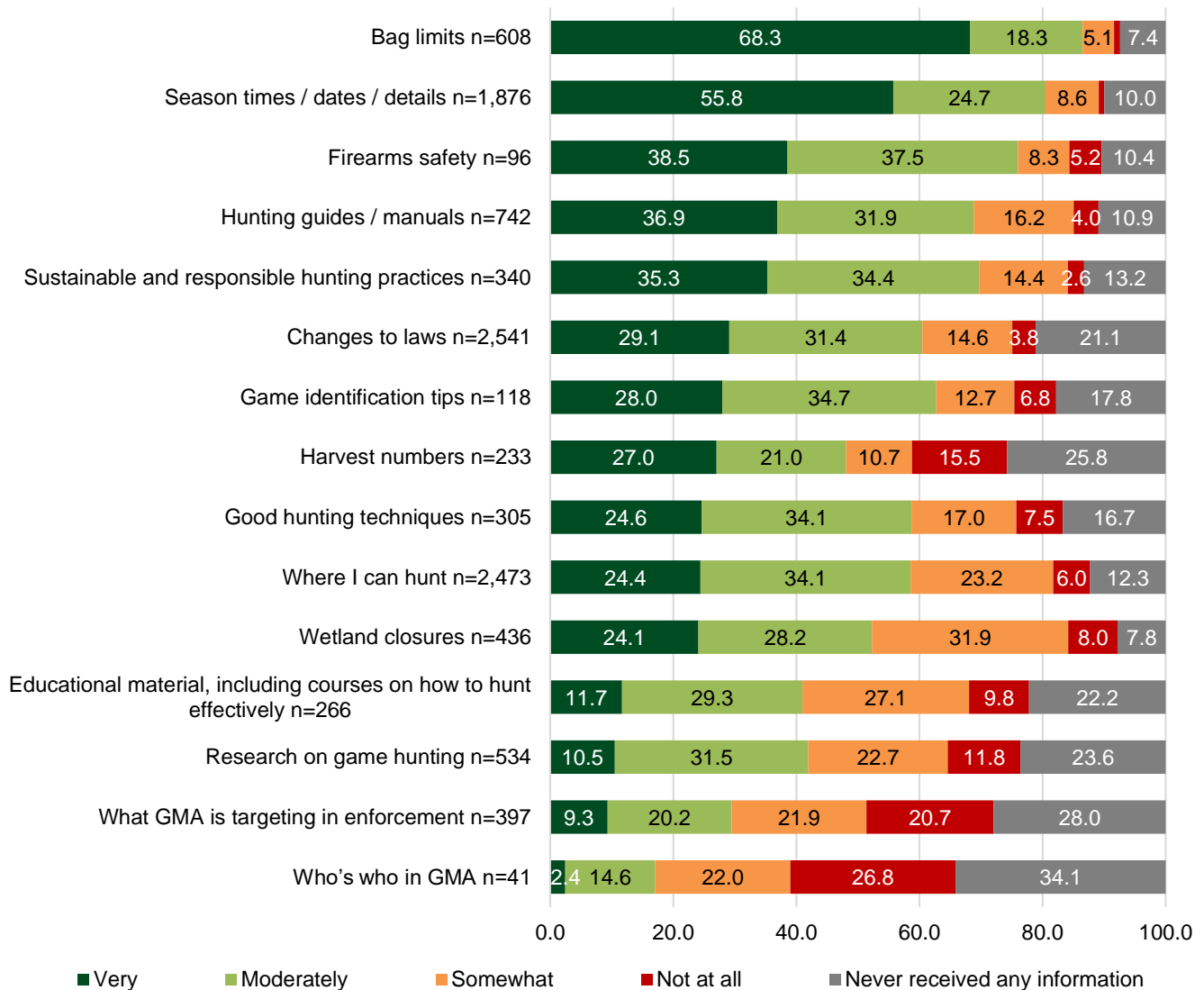
When all topics were compared, the topic with the highest proportion of respondents who indicated that they had never received any information was *Who's who in GMA* (34%). With this fairly high proportion of *no information* in mind, two different charts were produced for this topic. The first chart includes *never received any information* in the percentage calculations and the second chart displays percentages based on respondents who only selected that the information was *very clear* or *not at all clear*. ASR conducts this secondary type analysis which excludes those with no view, because focusing only on those who have had an experience gives a clearer idea of sentiment about the experience

The first chart below (includes no information) has been sorted by the percentage of respondents who selected *very clear*. Information regarding bag limits and season dates / times / details was rated as *very clear* by 68% and 56% of all respondents respectively. No other topics achieved a 50% rating or above for *very clear* information.

The two most important topics, **changes to laws** and **where I can hunt**, as presented in the chart above, achieved *very clear* ratings of 29% and 24% respectively. The three items with the highest proportion of *not at all clear* ratings were **who's who in GMA** (27% *not at all clear*), **what GMA is targeting in enforcing** (21% *not at all clear*) and **harvest numbers** (16% *not at all clear*). It is important to note that **who's who in GMA** was only selected as an important topic by 1% of respondents.

How clear is the information GMA provides about the following topics...

% of respondents, n counts vary, includes no information respondents

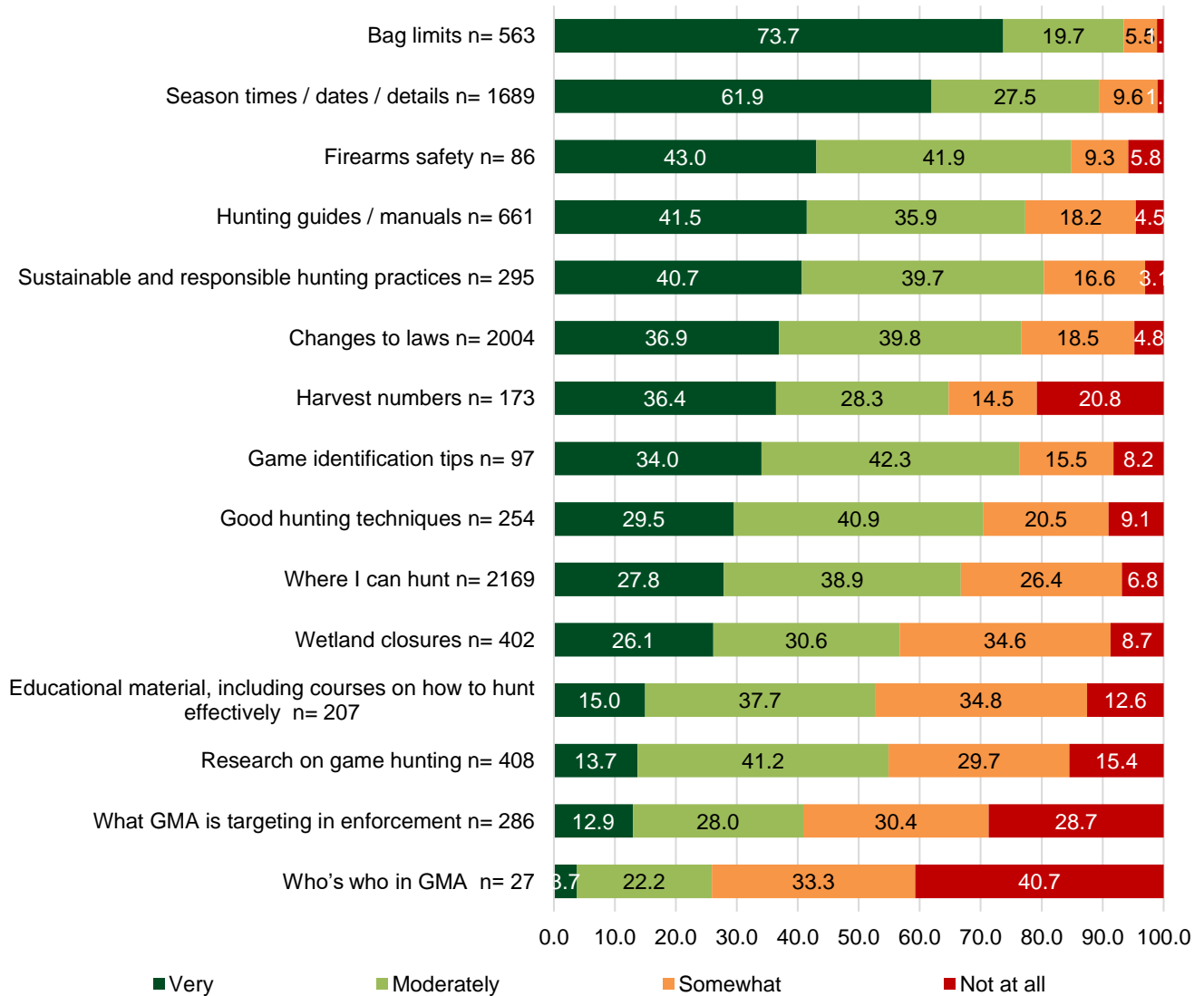


The chart below does not include respondents who selected *never received any information* in the calculation of percentages. It has been sorted in order of the percentage of respondents who selected *very clear*.

Seventy-four percent of respondents indicated that information relating to **bag limits** was *very clear* followed by 62% of respondents who indicated that information regarding **season times / dates / details** was *very clear*. Thirty-seven percent of respondents indicated that information about **changes to laws** was *very clear* followed by 29% of respondents who indicated that information regarding **where they could hunt** was *very clear*.

How clear is the information GMA provides about the following topics...

% of respondents, n counts vary



Respondents who indicated the information GMA provides about one or more of the topics was *not at all* or *somewhat clear* were asked to explain why they chose that answer. In total, 1,022 respondents provided feedback. Many respondents to this question offered suggestions for improvement. The table below displays the theme (group or categorisation) as well as a specific example within the theme and the percentage of respondents who mentioned the theme. A random sample of 517 responses were coded.

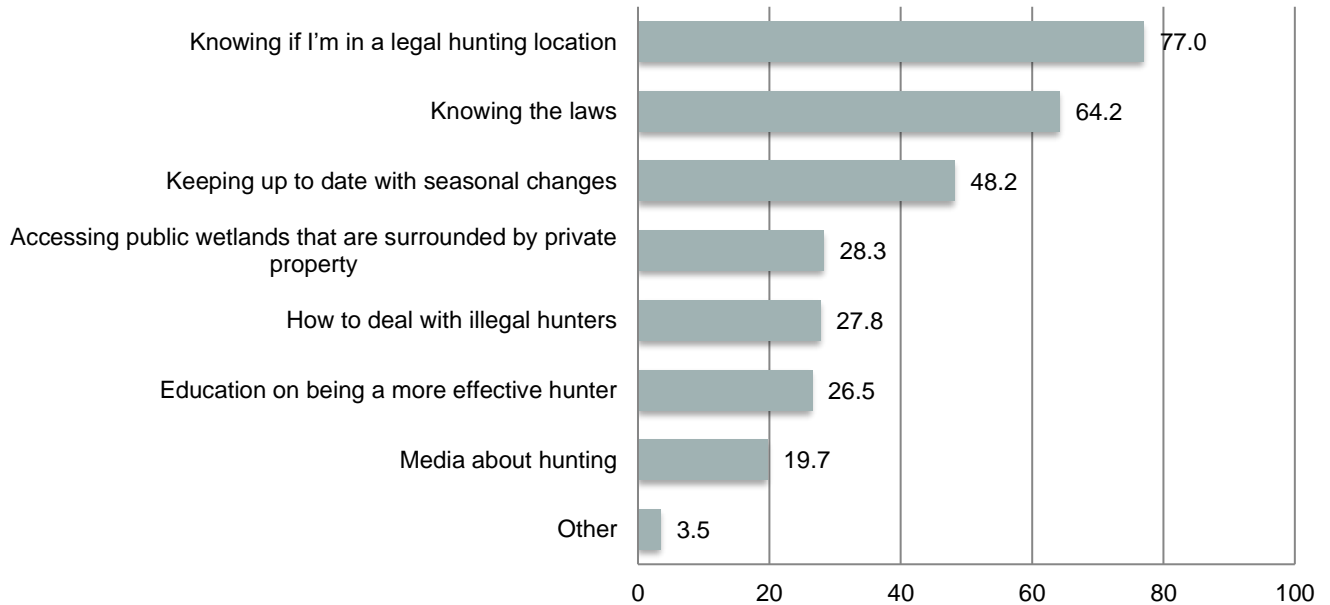
Theme (n=517)	Exemplary comments	%
Information not clear: tell me exactly where and what I can hunt clearly and with maps	<i>Where one can legally hunt on crown land and forests is not always clear and can change seasonally. We can be held liable if in a wrong area and that could be unfair if it was unintentionally.</i>	31.7
Maps: incorrect / outdated / hard to read / ill-defined boundaries	<i>Would be good if the maps were more detailed and the road placement more accurate, it's basically a mud map that could costs your license if you get it wrong.</i>	8.7
Keep us up to date about changes in a timely manner / suggest email or SMS updates	<i>Late notification of wetland closure. Not properly circulated and not done early enough as many hunters plan their opening weekend trip in advance. Many travel great distance only to arrive and find wetland closed at last minute. This is not fair.</i>	6.2
Not enough information provided (positive or negative) / have never received any information about a topic from GMA	<i>I Don't remember seeing much [information] or they are not putting it out there through social media, clubs, magazines etc in an effective way.</i>	5.9
Website difficult to navigate and find what you are looking for	<i>The GMA website is very confusing and hard to find a direct answer that is clear to answer some of my questions</i>	4.6
Provide the rationale behind decisions / be more transparent / publicise research findings	<i>More public notice on closure of specific wetlands, and reasons for not reopening these wetlands. In all fairness, ducks do fly, and can easily migrate to other wetlands, thus rendering a valuable wetland a wasted entity for 2018.</i>	4.6
More education wanted: how to hunt, ethics of hunting	<i>Because I would like to receive more booklets and hunting information each year so I can become a better and more ethical hunter as well as game identification</i>	4.5
Other	<i>Included a variety of themes such as, more information about harvest numbers, and us and them attitude displayed by GMA, positive comments about GMA information.</i>	7.2

The majority of respondents wanted to know whether or not they were **hunting in a legal location** (77%) and wanted to be **sure of the laws** (64%). Refer to the chart below. This sentiment is reiterated throughout the numeric and open-ended responses in the entire survey. Hunters want to be *certain* that they are doing the right thing in the right place. Open ended comments were provided by 108 respondents and common themes included:

- Dealing with protesters, and
- Maps and information about what to hunt and where.

What are the main interests you have in relation to game hunting and game management in Victoria?

% of respondents, multiple answers allowed so total may be >100%, n=3,856



Overall

Respondents were asked to provide feedback on how GMA communicates with Game Licence Holders. Approximately 1,875 responses were recorded. A random sample of 519 responses was thematically coded. Common themes are presented in the table below, with an example provided in the right hand column. Forty-three percent of comments were in regards to respondents wanting to be kept up to date by GMA, with clear, frequent and timely communication.

Theme (n=519)	Exemplary comments	% of 519 comments
Keep us up to date (clear, frequent and timely communication) / email, app, SMS alerts regarding changes	<i>It's the lack of communication that causes tension in the hunting community. Late announcements cause a stir on social platforms and impacts and undermines the good GMA work. My advice is get ahead and be proactive.</i>	43.0
Tell me EXACTLY when and when I can hunt / remove grey areas (includes maps)	<i>The more information you can give about where to hunt, where not to hunt, what is expected when transporting firearms, and examples of good hunters and bad hunters and what has happened to people who break the law so everyone knows what is expected.</i>	18.3
Positive comment / GMA doing a good job	<i>Keep up the great work they do and supply all information in an understanding way.</i>	13.5
Have a better relationship with hunters / more support / consultative / positive promotion	<i>Poor and not aligned to their audience nor committed to hunting as a government organisation.</i>	8.3
Booklet / printed guide is well received / useful good / want more like this	<i>Don't just rely on electronic media; keep the paper communication going. Printed media is good in the field, especially when you don't have phone reception. And please keep the font a decent size so that it can be read easily by those of us who don't have 100% vision.</i>	7.1
More enforcement of hunters who do the wrong thing	<i>Please please please police better or have a bigger physical presence in the field. I have witnessed and reported poaching, spotlighting, aggressive behaviour and it just seems to be getting worse and worse.</i>	5.0
More enforcement of protesters	<i>How they are dealing with illegal protesters?</i>	3.9
Would prefer an App	<i>Make more use of the GMA app - latest news / updates and allow deer maps to be downloaded onto app for field use and communicate legal hunting areas.</i> <i>In app messaging with GMA in the area your hunting (e.g. ask local GMA officer a question or query).</i>	3.7

Respondents were also asked to indicate what they would like to experience more of in game hunting or game management. Approximately 1,995 respondents provided a comment. A random sample of 517 responses was coded.

Most commonly, responses were regarding *greater access to land* (24%). There was a wide range of other suggestions.

Theme (n=517)	Exemplary comments	% of 517 comments
Greater access to land (includes working with private land owners and opening up more areas to hunters)	<i>Access to more areas for hunting (ie: some national parks etc)</i>	23.7
Better enforcement for hunters who do the wrong thing / better reporting of illegal activity	<i>Getting tougher on people doing the wrong thing and making others look bad.</i>	9.5
Communicate more on all topics / ensure information is up to date and timely	<i>Just to be kept up to date with the latest Law changes or where to hunt areas.</i>	8.6
Tell me EXACTLY where and when I can hunt / I want to be doing the right thing	<i>Easy clear, precise targeted information modules with NO ambiguity in the headings.</i>	7.2
More education : workshops / tips / techniques / education	<i>More proactive education sessions or events from GMA to licence holders so that both parties are clear on what is required or expected of them. Not just a policing of licence holders.</i>	7.2
GMA should deal with protesters better (on and off the field)	<i>Need to know more about how we can interact with protesters. I feel the hunter has no rights in his sport at all. Stiffer penalties are needed.</i>	6.8
Make it easier to hunt pest animals (legal and approved)	<i>More bounties on feral animals, in other words target more animals that are getting out of control</i>	6.6
Have a better relationship with hunters / support us / us and them mentality	<i>How can hunters be more utilised by the GMA. I.e. relationship building between the two (hunters and GMA).</i>	6.6
GMA to promote positive public image / benefits of hunting to environment and economy	<i>We need a more positive profile in the community. Without conservation we are unable to hunt. The two must be more positively linked.</i>	6.2
Better maps / definitive and clear maps	<i>Downloadable GPS map overlays. More interactive maps or printable maps that are up to date.</i>	5.6
Extend season dates /times	<i>Improved open season periods to bettering coincide with seasonal breeding variations of game birds</i>	5.1
Opportunity to hunt / freedom to hunt / more time to hunt	<i>More opportunities to hunt. Being quite new to the scene it can be difficult to find decent/good hunting ground. I have spent over the last 12 months looking for populated deer areas</i>	5.1
Maintain wetlands / game reserves etc. Be part of conservation effort	<i>Wetlands to be better maintained for the benefit of everyone, more duck research and more properly trained GMA staff</i>	3.1
Happy as is / positive comment		2.7
Other	<i>Included more transparency regarding decision making, changes to bag limits etc.</i>	7.2

Licence holder attribute analysis

This section shows the results for the attribute analysis that was conducted using respondents' attributes (demographics) of gender, age group, permit sub-type and licence tenure.

Attribute analysis is conducted to identify where there are similarities and differences between sub groups. It provides insight that overall or aggregated analysis cannot. It helps answer the question "Do sub-groups have similar or different views?"

Gender

Due to the disproportionate number of male and female respondents, significance testing was not conducted. With sub-groups of very dissimilar sizes, this type of testing is usually unreliable. The results below are indicative only and only items with a difference of $\pm 5\%$ between the attribute sub-groups have been included in the table. There is no clear pattern in the gender differences.

DIFFERENT ITEM/S - GENDER	Male % n=3,749	Female % n=133	% difference (male minus female %)
What types of interactions did you have with GMA in the past 12 months? New licence / licence renewal	67.2	77.3	10.1
When you want to find out something important to you about game management or game hunting, where or who do you go to? Friends / family	31.5	40.2	8.7
How would you like to receive game management or hunting information from the GMA? In emails sent to me	75.4	68.4	-7.0
What are the most important topics that you want to know about game hunting? Where I can hunt	64.3	54.1	-10.2
What are the most important topics that you want to know about game hunting? Season times / dates / details	48.4	53.1	4.7
How clear is the information GMA provides about... Bag limits - very clear	68.8	50.0	-18.8
How clear is the information GMA provides about... Wetland closures -very clear	23.7	33.3	9.6
How clear is the information GMA provides about... Firearms safety- very clear	40.2	22.2	-18.0
How clear is the information GMA provides about... What GMA is targeting in enforcement- very clear	9.1	14.3	5.2
How clear is the information GMA provides about... Hunting guides / manuals- very clear	37.2	28.6	-8.6
How clear is the information GMA provides about... Research on game hunting - very clear	10.3	16.7	6.4
What are the main interests you have in relation to game hunting and game management in Victoria? - Accessing public wetlands that are surrounded by private property	28.6	20.3	-8.3

Notes: Total n varies by item because not all respondents were eligible to answer all questions. The maximum possible n is displayed in the table header. Some cell numbers (n counts) are very small so results should be interpreted with extreme caution.

Age group

Only items which were statistically significantly different at the 95% confidence level have been included in the sub-group comparison tables below. A statistically significant difference means that it is a true difference and not related to the survey's margin of error. These differences are presented using percentage scores and were analysed using a z-test. Statistically significantly higher results are highlighted in **yellow** and lower differences are highlighted in **blue**. A number of items were statistically significantly different between age groups.

Respondents in the age groups 25-34 and 35-44 years were significantly more likely to have interacted with GMA about a new licence / licence renewal in the last 12 months, compared with the other age groups.

Types of interactions with GMA in the past 12 months	Age group (years)													
	17-24		25-34		35-44		45-54		55-64		65+		Total	
	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %
New licence / licence renewal	126	70.4	558	73.2	672	68.9	645	66.8	384	62.3	172	59.5	2557	67.5
No interaction	29	16.2	135	17.7	210	21.5	204	21.1	161	26.1	94	32.5	833	22.0
Total	179	100.0	762	100.0	976	100.0	965	100.0	616	100.0	289	100.0	3787	100.0

Respondents aged 65 and over were significantly less likely to use social media groups, the GMA Facebook page, the GMA website and the GMA phone app when compared with those under 55 years.

When you want to find out something important to you about game mgt or game hunting, where or who do you go to?	Age group													
	17-24		25-34		35-44		45-54		55-64		65+		Total	
	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %
Friends / family	83	44.6	295	37.7	302	30.4	301	30.6	166	26.5	84	28.3	1231	31.8
Hunting organisation or club that I'm a member of	38	20.4	150	19.2	220	22.1	307	31.2	262	41.8	124	41.8	1101	28.5
Social media groups	55	29.6	223	28.5	227	22.8	189	19.2	73	11.6	33	11.1	800	20.7
GMA Facebook	28	15.1	86	11.0	93	9.4	75	7.6	36	5.7	15	5.1	333	8.6
GMA website	123	66.1	549	70.2	674	67.8	644	65.5	406	64.8	158	53.2	2554	66.0
Game Hunting Vic phone App	59	31.7	337	43.1	385	38.7	299	30.4	136	21.7	49	16.5	1265	32.7
Total	186	100.0	782	100.0	994	100.0	983	100.0	627	100.0	297	100.0	3869	100.0

Respondents aged 55 and over were significantly less likely to want to receive information through SMS text, the GMA Facebook page and the GMA phone app when compared with those under 45 years. Conversely, 55-64 year olds were most likely to prefer email while the youngest group (17-24 year olds) were least likely to use email and more likely to use apps.

How would you like to receive game mgt or hunting information from the GMA?	Age group													
	17-24		25-34		35-44		45-54		55-64		65+		Total	
	n	Col %	n	Col %	n	Col %	n	n	Col %	n	Col %	n	Col %	n
In emails sent to me	129	69.4	558	71.5	743	74.5	759	77.1	499	79.8	220	74.3	2908	75.2
In the mail / printed	76	40.9	307	39.4	319	32.0	306	31.1	183	29.3	105	35.5	1296	33.5
SMS text	53	28.5	208	26.7	237	23.8	210	21.3	108	17.3	33	11.1	849	21.9
Facebook	45	24.2	199	25.5	184	18.5	168	17.1	64	10.2	23	7.8	683	17.7
Social media app	29	15.6	73	9.4	50	5.0	32	3.3	8	1.3	4	1.4	196	5.1
Total	186	100.0	780	100.0	997	100.0	984	100.0	625	100.0	296	100.0	3868	100.0

Respondents aged 55 and over were significantly less interested in the topics *where I can hunt* and *educational material*, compared with respondents under 55 years, while younger hunters were less interested in season details.

What are the most important topics that you want to know about game hunting?	Age group													
	17-24		25-34		35-44		45-54		55-64		65+		Total	
	n	Col %	n	Col %	n	Col %	n	n	Col %	n	Col %	n	Col %	n
Season times / dates / details	94	50.5	349	44.6	452	45.2	488	49.5	344	54.7	157	52.3	1884	48.5
Where I can hunt	124	66.7	552	70.6	651	65.2	652	66.1	350	55.6	155	51.7	2484	64.0
Who's who in GMA	1	.5	2	.3	10	1.0	10	1.0	12	1.9	6	2.0	41	1.1
Educational material, including courses on how to hunt effectively	12	6.5	75	9.6	71	7.1	69	7.0	28	4.5	11	3.7	266	6.9
Total	186	100.0	782	100.0	999	100.0	986	100.0	629	100.0	300	100.0	3882	100.0

Respondents aged 45 and over found the information provided about changes to laws significantly clearer than those aged 25-34 years. The 55-64 group found good hunting technique information more clear.

How clear is the information GMA provides about...	Age group													
	17-24		25-34		35-44		45-54		55-64		65+		Total	
	Very clear n	Very clear %	Very clear n	Very clear %	Very clear n	Very clear %	Very clear n	Very clear %	Very clear n	Very Clear %	Very clear n	Very clear %	Very clear n	Very clear %
Changes to laws	37	30.8	103	21.4	177	26.5	211	32.3	135	33.0	76	36.2	739	29.1
Good hunting techniques	5	22.7	14	20.0	12	16.0	22	28.6	18	45.0	4	19.0	75	24.6

Respondents aged 45-54 were significantly less interested in all topics in the table below, apart from the topic *knowing the laws*. The 25-34 group were more interested in this topic than any other topic, but less interested in the topic than any other age group.

What are the main interests you have in relation to game hunting and game mgt in Victoria?	Age group													
	17-24		25-34		35-44		45-54		55-64		65+		Total	
	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %
Knowing the laws	110	59.8	450	58.0	622	62.5	657	67.1	428	68.4	208	70.3	2475	64.2
Education on being a more effective hunter	49	26.6	236	30.4	286	28.7	232	23.7	155	24.8	64	21.6	1022	26.5
Media about hunting	36	19.6	185	23.8	190	19.1	163	16.6	126	20.1	60	20.3	760	19.7
Accessing public wetlands that are surrounded by private property	64	34.8	227	29.3	280	28.1	242	24.7	177	28.3	100	33.8	1090	28.3
Total	184	100.0	776	100.0	995	100.0	979	100.0	626	100.0	296	100.0	3856	100.0

Respondents aged under 55 years were significantly more likely to have hunted for deer - stalking in the last 12 months, compared with respondents aged 55 years and over, while this latter group was slightly more likely to have not hunted in the last 12 months.

In the last 12 months what did you hunt for in Victoria?	Age group													
	17-24		25-34		35-44		45-54		55-64		65+		Total	
	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %
Deer – stalking	139	75.1	631	81.5	734	74.2	679	69.6	379	60.9	156	52.5	2718	70.7
Deer – hounds	20	10.8	91	11.8	101	10.2	75	7.7	40	6.4	18	6.1	345	9.0
Duck	76	41.1	274	35.4	340	34.4	334	34.2	248	39.9	148	49.8	1420	37.0
I didn't hunt in the last 12 months	13	7.0	37	4.8	70	7.1	77	7.9	65	10.5	38	12.8	300	7.8
Total	185	100.0	774	100.0	989	100.0	976	100.0	622	100.0	297	100.0	3843	100.0

Totally not surprising is that older people have had a game licence for longer and younger people have had it for shorter periods.

How many years have you had a Victorian Game Licence?	Age group													
	17-24		25-34		35-44		45-54		55-64		65+		Total	
	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %
Less than 1	27	14.7	63	8.2	51	5.2	53	5.4	26	4.2	8	2.7	228	5.9
1 - 2	37	20.1	140	18.1	163	16.5	155	15.9	65	10.5	22	7.4	582	15.2
3 - 5	64	34.8	247	32.0	257	26.0	214	21.9	100	16.1	35	11.8	917	23.9
6 - 7	16	8.7	101	13.1	105	10.6	77	7.9	34	5.5	21	7.1	354	9.2
8 - 9	6	3.3	59	7.6	55	5.6	47	4.8	23	3.7	9	3.0	199	5.2
10 - 15	5	2.7	110	14.2	145	14.7	105	10.8	51	8.2	28	9.4	444	11.6
16 - 20	3	1.6	28	3.6	84	8.5	58	5.9	44	7.1	15	5.1	232	6.0
More than 20	26	14.1	25	3.2	127	12.9	266	27.3	277	44.7	159	53.5	880	22.9
Total	184	100.0	773	100.0	987	100.0	975	100.0	620	100.0	297	100.0	3836	100.0

Respondents aged under 55 years were significantly more likely to be a member of a hunting-related social media community, compared with those aged over 55 years. Respondents aged 45 years or over were significantly more likely to be a member of a hunting organisation or club (compared with those aged under 35). This finding just confirms that younger people use social media more than older people.

Are you a member of...?	Age group													
	17-24		25-34		35-44		45-54		55-64		65+		Total	
	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %
Hunting organisation or club	77	42.5	343	45.0	492	51.1	544	56.4	390	63.6	183	62.5	2029	53.7
Hunting-related social media community	107	59.1	451	59.2	473	49.2	384	39.8	145	23.7	49	16.7	1609	42.6
Total	181	100.0	762	100.0	962	100.0	964	100.0	613	100.0	293	100.0	3775	100.0

Permit sub type

Only items which were statistically significantly different at the 95% confidence level have been included in the sub-group comparison tables below. These differences are presented using percentage scores and were analysed using a z test. Statistically significantly higher results are highlighted in **yellow** and lower differences are highlighted in **blue**.

There were significant differences between permit sub-type groups in terms of the types of interactions they had with GMA in the last 12 months. Those with a deer only licence were significantly more likely to have interacted with GMA about a new licence / licence renewal. Duck and game birds licence holders were more likely to have had no interactions when compared with deer only licence holders.

What types of interactions did you have with GMA in the past 12 months?	Licence sub type							
	Deer only		Deer, duck and game birds		Duck and game birds only		Total	
	Count	Col %	Count	Col %	Count	Col %	Count	Col %
New licence / licence renewal	1466	71.1	682	63.0	409	63.6	2557	67.5
Spoke with GMA staff at an Expo, Show or club event	126	6.1	96	8.9	44	6.8	266	7.0
Meet GMA staff in the field whilst hunting	57	2.8	144	13.3	63	9.8	264	7.0
No interaction	426	20.7	240	22.2	167	26.0	833	22.0
Total	2062	100.0	1082	100.0	643	100.0	3787	100.0

Respondents with a duck and game birds licence were significantly less likely to have used the GMA website or the GMA phone app to look for information, compared with the other permit holders.

When you want to find out something important to you about game mgt or game hunting, where or who do you go to?	Licence sub type							
	Deer only		Deer, duck and game birds		Duck and game birds only		Total	
	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Friends / family	622	29.7	365	32.8	244	37.0	1231	31.8
GMA Facebook	130	6.2	118	10.6	85	12.9	333	8.6
GMA website	1445	69.0	729	65.4	380	57.6	2554	66.0
Game Hunting Vic phone App	645	30.8	431	38.7	189	28.6	1265	32.7
Total	2095	100.0	1114	100.0	660	100.0	3869	100.0

Respondents with a deer, duck and game birds licence were significantly more likely to want to receive information through all channels in the table below with the exception of email, but email was still the most preferred method for all licence types.

How would you like to receive game mgt or hunting information from the GMA?	Licence sub type							
	Deer only		Deer, duck and game birds		Duck and game birds only		Total	
	Count	Col %	Count	Col %	Count	Col %	Count	Col %
In emails sent to me	1619	77.2	820	73.7	469	71.1	2908	75.2
Going to the GMA website	672	32.1	391	35.2	188	28.5	1251	32.3
In the mail / printed	615	29.3	436	39.2	245	37.1	1296	33.5
SMS text	406	19.4	288	25.9	155	23.5	849	21.9
Facebook	330	15.7	239	21.5	114	17.3	683	17.7
Total	2096	100.0	1112	100.0	660	100.0	3868	100.0

Respondents with a deer only licence were significantly more likely to want to know about the majority of topics in the table below; most notably the topic *where I can hunt* and *changes to laws*.

What are the most important topics that you want to know about game hunting?	Licence sub type							
	Deer only		Deer, duck and game birds		Duck and game birds only		Total	
	Count	Col %	Count	Col %	Count	Col %	Count	Col %
Changes to laws	1451	69.0	716	64.2	386	58.0	2553	65.8
Bag limits	140	6.7	237	21.3	234	35.2	611	15.7
Season times / dates / details	856	40.7	600	53.8	428	64.4	1884	48.5
Where I can hunt	1537	73.1	666	59.7	281	42.3	2484	64.0
Wetland closures	31	1.5	208	18.7	198	29.8	437	11.3
Sustainable and responsible hunting practices	224	10.7	77	6.9	42	6.3	343	8.8
Good hunting techniques	231	11.0	52	4.7	23	3.5	306	7.9
What GMA is targeting in enforcement	230	10.9	122	10.9	46	6.9	398	10.3
Hunting guides / manuals	455	21.6	182	16.3	107	16.1	744	19.2
Research on game hunting	332	15.8	145	13.0	62	9.3	539	13.9
Educational material, including courses on how to hunt effectively	186	8.8	54	4.8	26	3.9	266	6.9
Total	2102	100.0	1115	100.0	665	100.0	3882	100.0

Respondents with duck and game birds only licences were more likely to rate GMA information as very clear compared with those with deer only licences.

How clear is the information GMA provides about...	Deer only - % of respondents who selected very clear		Deer, duck and game birds - % of respondents who selected very clear		Duck and game birds only - % of respondents who selected very clear		Total - % of respondents who selected very clear	
	n	Row %	n	Row %	n	Row %	n	Row %
Changes to laws	365	25.3	204	28.6	170	44.0	739	29.1
Bag limits	71	51.4	171	72.5	173	73.9	415	68.3
Season times / dates / details	418	49.2	348	58.2	280	65.4	1046	55.8
Where I can hunt	406	26.6	123	18.6	75	26.7	604	24.4
Harvest numbers	28	21.2	21	29.2	14	48.3	63	27.0
Game identification tips	9	14.8	10	32.3	14	53.8	33	28.0
Hunting guides / manuals	147	32.4	73	40.3	54	50.5	274	36.9

Respondents with deer only or deer, duck and game birds licences were more likely to be interested in knowing whether they were in a legal hunting area than those with a duck and game birds permit. Deer only permit holder were significantly less likely to be interested in keeping up to date with seasonal changes, compared with the other permit holders.

What are the main interests you have in relation to game hunting and game management in Victoria?	Licence sub type							
	Deer only		Deer, duck and game birds		Duck and game birds only		Total	
	n	Col %	n	Col %	n	Col %	n	Col %
Education on being a more effective hunter	657	31.5	224	20.2	141	21.3	1022	26.5
Media about hunting	377	18.1	247	22.3	136	20.5	760	19.7
Keeping up to date with seasonal changes	822	39.4	628	56.7	408	61.6	1858	48.2
Knowing if I'm in a legal hunting location	1743	83.5	843	76.2	384	58.0	2970	77.0
Accessing public wetlands that are surrounded by private property	287	13.8	487	44.0	316	47.7	1090	28.3
Total	2087	100.0	1107	100.0	662	100.0	3856	100.0

Respondents with a deer, duck and game birds licences were significantly more likely to be a member of any hunting related organisation / club / group or community, compared with the other permit groups.

Are you a member of...?	Licence sub type							
	Deer only		Deer, duck and game birds		Duck and game birds only		Total	
	n	Col %	n	Col %	n	Col %	n	Col %
Hunting organisation or club	984	48.3	710	65.3	335	51.5	2029	53.7
Hunting-related social media community	899	44.2	523	48.1	187	28.7	1609	42.6
Another type of hunting-related group	123	6.0	91	8.4	24	3.7	238	6.3
None of the above	587	28.8	213	19.6	240	36.9	1040	27.5
Total	2036	100.0	1088	100.0	651	100.0	3775	100.0

Licence tenure

Only items which were statistically significantly different at the 95% confidence level have been included in the sub-group comparison tables below. These differences are presented using percentage scores and were analysed using a z test. Statistically significantly higher results are highlighted in **yellow** and lower differences are highlighted in **blue**. A number of items were statistically significantly different between respondents with different licence terms.

Respondents with a licence tenure of 20+ years were significantly less likely to have had interactions with GMA about a new licence / licence renewal in the past 12 months, compared to those with a shorter tenure. Those with a licence tenure of up to 3 years were significantly more likely to have had an over the counter interaction with GMA in the last 12 months, compared with the other groups.

What types of interactions did you have with GMA in the past 12 months?	Licence tenure											
	Up to 3 years		3-5 years		6-9 years		10-20 years		20+ years		Total	
	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %
New licence / licence renewal	627	78.7	634	70.6	372	69.4	432	65.5	467	54.9	2557	67.5
Over the counter at a GMA office	133	16.7	72	8.0	42	7.8	50	7.6	62	7.3	364	9.6
Meet GMA staff in the field whilst hunting	16	2.0	34	3.8	31	5.8	60	9.1	122	14.3	264	7.0
Total	797	100.0	898	100.0	536	100.0	660	100.0	851	100.0	3787	100.0

Respondents with a licence tenure of 10+ years were significantly more likely to refer to a hunting organisation or club that they're a member of to find out about game management or game hunting, compared with those with a shorter licence tenure.

When you want to find out something important to you about game management or game hunting, where or who do you go to?	Licence tenure											
	Up to 3 years		3-5 years		6-9 years		10-20 years		20+ years		Total	
	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %
Hunting organisation or club that I'm a member of	166	20.6	194	21.2	149	26.9	210	31.3	368	41.9	1101	28.5
Social media	185	22.9	186	20.3	147	26.6	138	20.6	135	15.4	800	20.7
GMA Facebook	53	6.6	64	7.0	57	10.3	76	11.3	79	9.0	333	8.6
GMA website	574	71.1	631	69.0	375	67.8	432	64.5	515	58.7	2554	66.0
Game Hunting Vic phone App	252	31.2	326	35.6	224	40.5	227	33.9	225	25.6	1265	32.7
Total	807	100.0	915	100.0	553	100.0	670	100.0	878	100.0	3869	100.0

Respondents with a licence tenure of under 20 years were significantly more interested in receiving game management or hunting information from the GMA through social media apps like Instagram, Twitter or Snapchat.

How would you like to receive game management or hunting information from the GMA?	Licence tenure											
	Up to 3 years		3-5 years		6-9 years		10-20 years		20+ years		Total	
	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %
In emails sent to me	640	79.2	701	76.6	403	73.1	480	71.2	648	74.1	2908	75.2
In the mail / printed	183	22.6	298	32.6	202	36.7	270	40.1	325	37.2	1296	33.5
Social media app like Instagram, Twitter, Snapchat	51	6.3	54	5.9	40	7.3	31	4.6	20	2.3	196	5.1
Total	808	100.0	915	100.0	551	100.0	674	100.0	874	100.0	3868	100.0

Respondents with a licence tenure of under 3 years were significantly more likely to wish to receive information about most of the topics in the table below. Those with a tenure of 10+ years were significantly more likely to want information about bag limits and wetlands closures, compared with other licence tenure groups.

What are the most important topics that you want to know about game hunting?	Licence tenure											
	Up to 3 years		3-5 years		6-9 years		10-20 years		20+ years		Total	
	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %
Bag limits	79	9.8	100	10.9	79	14.3	131	19.4	220	25.0	611	15.7
Season times / dates / details	379	46.8	408	44.5	252	45.6	332	49.1	497	56.5	1884	48.5
Where I can hunt	610	75.3	648	70.7	388	70.2	396	58.6	416	47.3	2484	64.0
Wetland closures	24	3.0	56	6.1	33	6.0	102	15.1	216	24.5	437	11.3
Sustainable and responsible hunting practices	91	11.2	79	8.6	46	8.3	67	9.9	55	6.3	343	8.8
Good hunting techniques	105	13.0	102	11.1	41	7.4	28	4.1	25	2.8	306	7.9
Game identification tips	39	4.8	36	3.9	10	1.8	18	2.7	14	1.6	118	3.0
Educational material, including courses on how to hunt effectively	87	10.7	84	9.2	38	6.9	29	4.3	22	2.5	266	6.9
Total	810	100.0	917	100.0	553	100.0	676	100.0	880	100.0	3882	100.0

Respondents who have been licenced for more than 20 years were more likely to rate information from the GMA as very clear compared with other groups.

How clear is the information GMA provides about...	Licence tenure - % of respondents who selected Very clear											
	Up to 3 years		3-5 years		6-9 years		10-20 years		20+ years		Total	
	n	Row N %	n	Row N %	n	Row N %	n	Row N %	n	Row N %	n	Row N %
Changes to laws	147	28.6	167	27.6	96	24.9	117	26.7	204	36.0	731	29.1
Bag limits	43	54.4	64	64.6	48	60.8	92	70.8	92	75.8	413	68.2
Season times / dates / details	186	49.3	208	51.4	126	50.2	194	58.4	325	65.7	1039	55.9
Where I can hunt	170	28.0	159	24.7	91	23.5	81	20.6	95	22.9	596	24.4
Wetland closures	6	25.0	11	19.6	5	15.6	26	25.5	26	25.5	103	24.0
Hunting guides / manuals	58	31.5	54	30.2	39	39.4	41	34.7	77	50.0	269	36.6

Respondents with a licence tenure of under 10 years were significantly more likely to be interested in education on being a more effective hunter and knowing if they are in a legal hunting location, compared with other licence tenure groups.

What are the main interests you have in relation to game hunting and game management in Victoria?	Licence tenure											
	Up to 3 years		3-5 years		6-9 years		10-20 years		20+ years		Total	
	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %
Education on being a more effective hunter	305	37.9	295	32.3	143	26.0	131	19.6	138	15.8	1022	26.5
Media about hunting	122	15.2	174	19.1	111	20.2	152	22.7	194	22.2	760	19.7
Keeping up to date with seasonal changes	330	41.0	385	42.2	281	51.2	341	50.9	500	57.2	1858	48.2
Knowing if I'm in a legal hunting location	673	83.7	764	83.7	438	79.8	481	71.8	578	66.1	2970	77.0
Accessing public wetlands that are surrounded by private property	148	18.4	205	22.5	148	27.0	209	31.2	371	42.4	1090	28.3
Other	14	1.7	24	2.6	13	2.4	26	3.9	57	6.5	134	3.5
Total	804	100.0	913	100.0	549	100.0	670	100.0	874	100.0	3856	100.0

Respondents with a licence tenure of over 10+ years were significantly more likely to have hunted for deer – hounds, quail and pests in the last 12 months, compared with other licence tenure groups.

In the last 12 months what did you hunt for in Victoria?	Licence tenure											
	Up to 3 years		3-5 years		6-9 years		10-20 years		20+ years		Total	
	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %
Deer – stalking	612	75.6	739	80.6	441	79.7	470	69.5	452	51.4	2718	70.7
Deer – hounds	25	3.1	56	6.1	52	9.4	103	15.2	108	12.3	345	9.0
Quail	36	4.4	53	5.8	51	9.2	126	18.6	291	33.1	557	14.5
Pest	337	41.6	457	49.8	353	63.8	431	63.8	619	70.3	2200	57.2
I didn't hunt in the last 12 months	109	13.5	73	8.0	32	5.8	39	5.8	46	5.2	300	7.8
Total	810	100.0	917	100.0	553	100.0	676	100.0	880	100.0	3843	100.0

Respondents with a licence tenure of under 20+ years were significantly more likely to be a member of a hunting-related social media community, compared with other licence tenure groups.

Are you a member of...?	Licence tenure											
	Up to 3 years		3-5 years		6-9 years		10-20 years		20+ years		Total	
	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %	n	Col %
Hunting organisation or club	340	42.6	434	48.4	280	51.6	411	61.7	564	64.8	2029	53.7
Hunting-related social media community	338	42.3	432	48.2	268	49.4	307	46.1	264	30.3	1609	42.6
None of the above	264	33.0	239	26.7	145	26.7	161	24.2	231	26.5	1040	27.5
Total	799	100.0	896	100.0	543	100.0	666	100.0	871	100.0	3775	100.0

Conclusions

Overall, the results of the GMA communications survey were positive. A **good spread** of demographic sub groups (age, gender and permit type) participated.

The survey yielded consistent and clear results from the numeric and qualitative, open ended, data. Respondents repeatedly conveyed a core message: knowing, without a doubt, that they were **doing the right thing** when it came to hunting.

The **GMA website** and **phone app** were the two most commonly used sources for respondents to find out about game management and game hunting. Therefore it is important that the information on these sources is current, up to date and easy to find.

Facebook was the most commonly used social media channel, particularly those aged under 55 years. Several organisations appeared frequently in social media and website references, including the GMA, Field and Game Australia, the Sporting Shooters Association and the Australian Deer Association. It is noted that the GMA Facebook page was only created in March 2018 so it is likely that the use this communication tool will grow as awareness of its availability is made known.

Email was, by far, the most preferred method of receiving game management or hunting information from GMA and print was also preferred by a third of respondents. Open ended commentary suggested that print was preferred in the field as technology could fail and internet reception can be patchy in parts of Victoria.

Changes to laws, knowing where I can hunt and season times / dates / details were the three most important topics respondents wanted to know about game hunting out of the 15 topics presented in the survey.

Regarding clarity of information for these top three topics, season times / dates / details had the highest rating for being *very clear*. Just under a third of respondents suggested that information from GMA about where I can hunt was very clear and just over a third indicated this was the case for changes to laws. These results suggest that there is room for improvement in these areas. The biggest concern for respondents who indicated that any topic was *unclear* was that respondents wanted information from GMA to be **explicitly clear**, tell them exactly where they can hunt with clearly defined maps, borders and access points. This theme was reiterated throughout the entire survey. It is noted that the Department of Environment, Land, Water and Planning (DELWP) is the responsible government agency for providing this information and a new mapping tool is currently being developed to help hunters understand where that can and cannot hunt. Once completed, the GMA will make this available through their appropriate communication tools.

The main interest respondents had in relation to game hunting and game management in Victoria was **knowing if they were in a legal hunting location**. This was echoed in the open ended commentary.

The main thing respondents wanted to tell GMA about how it communicates with game licence holders was for **GMA to provide up to date, clear and timely information**. A number of related issues appeared within this theme. They included late announcements of wetland closures, changes to laws that were not communicated quickly enough and the desire for instant email or SMS alerts regarding changes. It is noted that the closure of wetlands to duck hunting can occur at very short notice given the movement of birds. So, while the timing of notifications can't change, it will be important to communicate the closures broadly to maximise awareness.

Greater access to land was the top priority for respondents when asked what they wanted more of in game hunting and game management. Greater access included opening more areas for hunting, allowing licence holders to hunt for more species on existing land as well as how to access legal areas surrounded by private property. There are policy matters for government to consider.

Numerous respondents indicated that this survey was the first time that GMA had interacted with them outside of its regulatory authoritative role; they indicated that the **survey was a good way** for the GMA to interact with licence holders. Further to this, open ended commentary highlighted the desire for a more **collaborative relationship** between GMA and licence holders. However, it is noted that a number of government agencies play a role in game management and managing game hunting in Victoria. The GMA is primary responsible for game licencing, education and research regarding game. DELWP is the state's public land manager and is responsible for overall wildlife policy and the management of public land. Parks Victoria is also responsible for managing reserved public land, including State Game Reserves and National Parks which provide significant hunting opportunities.

Effective collaboration between these responsible government agencies and the hunting community is a challenge that will require considerable and thoughtful effort from all involved.

Appendix A Postcode categories

Table A1: Victorian Metro Postcodes

3114, 3004, 3052, 3000, 3002, 3003, 3006, 3008, 3011, 3012, 3013, 3015, 3016, 3018, 3019, 3020, 3021, 3022, 3023, 3024, 3025, 3026, 3027, 3028, 3029, 3030, 3031, 3032, 3033, 3034, 3036, 3037, 3038, 3039, 3040, 3041, 3042, 3043, 3044, 3046, 3047, 3048, 3049, 3051, 3053, 3054, 3055, 3056, 3057, 3058, 3059, 3060, 3061, 3062, 3063, 3064, 3065, 3066, 3067, 3068, 3069, 3070, 3071, 3072, 3073, 3074, 3075, 3076, 3078, 3079, 3081, 3082, 3083, 3084, 3085, 3086, 3087, 3088, 3089, 3090, 3091, 3093, 3094, 3095, 3096, 3097, 3099, 3101, 3102, 3103, 3104, 3105, 3106, 3107, 3108, 3109, 3111, 3113, 3115, 3116, 3121, 3122, 3123, 3124, 3125, 3126, 3127, 3128, 3129, 3130, 3131, 3132, 3133, 3134, 3135, 3136, 3137, 3138, 3139, 3140, 3141, 3142, 3143, 3144, 3145, 3146, 3147, 3148, 3149, 3150, 3151, 3152, 3153, 3154, 3155, 3156, 3158, 3159, 3160, 3161, 3162, 3163, 3165, 3166, 3167, 3168, 3169, 3170, 3171, 3172, 3173, 3174, 3175, 3177, 3178, 3179, 3180, 3181, 3182, 3183, 3184, 3185, 3186, 3187, 3188, 3189, 3190, 3191, 3192, 3193, 3194, 3195, 3196, 3197, 3198, 3199, 3200, 3201, 3202, 3204, 3205, 3206, 3207

Table A2: Victorian Regional Postcodes

3687, 3946, 3676, 3211, 3212, 3213, 3214, 3215, 3216, 3217, 3218, 3219, 3220, 3221, 3222, 3223, 3224, 3225, 3226, 3227, 3228, 3230, 3231, 3232, 3233, 3235, 3236, 3237, 3238, 3239, 3240, 3241, 3242, 3243, 3249, 3250, 3251, 3254, 3260, 3264, 3265, 3266, 3267, 3268, 3269, 3272, 3273, 3274, 3275, 3276, 3277, 3278, 3280, 3281, 3282, 3283, 3284, 3285, 3286, 3287, 3289, 3292, 3294, 3300, 3301, 3302, 3303, 3304, 3305, 3309, 3310, 3311, 3312, 3314, 3315, 3317, 3318, 3319, 3321, 3324, 3325, 3328, 3329, 3330, 3331, 3332, 3333, 3334, 3335, 3337, 3338, 3340, 3341, 3342, 3345, 3350, 3351, 3352, 3355, 3356, 3357, 3358, 3360, 3361, 3363, 3364, 3370, 3371, 3373, 3374, 3375, 3377, 3378, 3379, 3380, 3381, 3384, 3385, 3387, 3388, 3390, 3391, 3392, 3393, 3395, 3396, 3400, 3402, 3401, 3407, 3409, 3412, 3413, 3414, 3418, 3419, 3420, 3423, 3424, 3427, 3428, 3429, 3430, 3431, 3433, 3434, 3435, 3437, 3438, 3440, 3441, 3442, 3444, 3446, 3448, 3450, 3451, 3453, 3458, 3460, 3461, 3462, 3463, 3464, 3465, 3467, 3468, 3469, 3472, 3475, 3477, 3478, 3480, 3482, 3483, 3490, 3491, 3494, 3496, 3498, 3500, 3501, 3505, 3507, 3509, 3512, 3515, 3516, 3517, 3518, 3520, 3521, 3522, 3523, 3525, 3527, 3530, 3531, 3533, 3537, 3540, 3542, 3544, 3546, 3549, 3550, 3551, 3552, 3555, 3556, 3557, 3558, 3559, 3561, 3562, 3563, 3564, 3566, 3567, 3568, 3570, 3571, 3572, 3573, 3575, 3579, 3580, 3581, 3584, 3585, 3586, 3588, 3589, 3590, 3591, 3594, 3595, 3596, 3597, 3608, 3610, 3612, 3614, 3616, 3617, 3618, 3620, 3621, 3622, 3623, 3624, 3629, 3630, 3631, 3633, 3634, 3635, 3636, 3637, 3638, 3639, 3640, 3641, 3644, 3646, 3649, 3658, 3659, 3660, 3662, 3663, 3664, 3666, 3669, 3670, 3672, 3673, 3675, 3677, 3678, 3682, 3683, 3685, 3688, 3690, 3691, 3694, 3695, 3697, 3699, 3700, 3701, 3705, 3707, 3709, 3711, 3712, 3713, 3714, 3715, 3717, 3719, 3720, 3722, 3723, 3725, 3726, 3727, 3728, 3730, 3732, 3733, 3735, 3737, 3739, 3740, 3741, 3744, 3746, 3747, 3749, 3750, 3751, 3752, 3753, 3754, 3756, 3757, 3758, 3759, 3760, 3761, 3763, 3764, 3765, 3766, 3767, 3770, 3775, 3777, 3778, 3779, 3781, 3782, 3783, 3785, 3786, 3788, 3789, 3791, 3792, 3793, 3795, 3796, 3797, 3799, 3802, 3803, 3804, 3805, 3806, 3807, 3808, 3809, 3810, 3812, 3813, 3814, 3815, 3816, 3818, 3820, 3821, 3822, 3823, 3824, 3825, 3831, 3832, 3833, 3835, 3840, 3842, 3844, 3847, 3850, 3851, 3852, 3854, 3856, 3857, 3858, 3859, 3860, 3862, 3864, 3869, 3870, 3871, 3873, 3874, 3875, 3878, 3880, 3882, 3885, 3886, 3887, 3888, 3889, 3890, 3891, 3892, 3895, 3896, 3898, 3900, 3902, 3903, 3904, 3909, 3910, 3911, 3912, 3913, 3915, 3916, 3918, 3919, 3921, 3922, 3923, 3925, 3926, 3927, 3928, 3929, 3930, 3931, 3933, 3934, 3936, 3937, 3938, 3939, 3940, 3941, 3942, 3943, 3944, 3945, 3950, 3951, 3953, 3954, 3956, 3957, 3958, 3959, 3960, 3962, 3966, 3971, 3975, 3976, 3977, 3978, 3979, 3980, 3981, 3984, 3987, 3988, 3991, 3992, 3995, 3996

Source Australia Post November 2017

Appendix B Questionnaire

Licensed Hunter Survey

Introduction

The Game Management Authority (GMA) is primarily responsible for licensing, educating and regulating game hunters in Victoria. The information from this survey will assist us in understanding and meeting the needs of game hunters.

We thank you in advance for taking time to give us feedback about how we communicate with you, and telling us about hunting and game management areas that are of interest to you.

This survey will also contribute to actions aimed at improving data collection as outlined in the governments *Sustainable Hunting Action Plan*.

Please answer by 25 June 2018.

GMA has engaged Australian Survey Research (ASR) to conduct the survey. All your answers will remain confidential to ASR and only summarised results will be presented to GMA. Click [here](#) for ASR's privacy policy.

Hints for answering

Use the **Next** icon at the bottom of each page to save your answers and move to the next page.

Use the **Previous** icon to move backwards in the survey —not your browser back button. This will take you out of the survey.

On the last page, use the Finalise icon to submit your answers. Finalising your survey will de-active your survey link.

After 60 minutes of navigation inactivity your browser will time out. Please save your answers as you go by using the **Next** or **Previous** icons.

Survey assistance

If you have any questions about this survey, please visit the Game Management Authority website.

If you have any technical difficulties, please contact Australian Survey Research during normal working hours (9am-5pm, Monday to Friday) on 1800 068 489 or gamesurvey@aussurveys.com.

Communicating with you

1. What types of interactions did you have with GMA in the past 12 months?

New licence / licence renewal

Over the counter at a GMA office

Spoke with GMA staff at an Expo, Show or club event

Meet GMA staff in the field whilst hunting

Other :Please detail _____

No interaction

2. When you want to find out something important to you about game management or game hunting, where or who do you go to?

Select all that apply

Friends / family

Hunting organisation or club that I'm a member of

Hunting organisation that I'm NOT a member of

Social media groups like forums, blogs, Facebook, Instagram, Twitter, etc

Game or hunting-related retail shops, like firearms, clothing, gear

GMA Facebook

GMA website

Game Hunting Vic phone App

Other government websites

Somewhere else :Please detail _____

3. What social media groups do you frequently interact with about game management or game hunting?

In your answer, please indicate the platform or app and the group name, like Facebook xxxx or Instagram yyyy. List up to 5.

1. _____

2. _____

3. _____

4. _____

5. _____

4. What are the websites you frequently visit for game management or game hunting information? *List up to 5.*

Website 1. _____

Website 2. _____

Website 3. _____

Website 4. _____

Website 5. _____

5. How would you like to receive game management or hunting information **from the GMA**?

Select all that apply

In emails sent to me

Going to the GMA website

In the mail / printed

SMS text

Facebook

Social media app like Instagram, Tweet, Snapchat

Some other way :Please detail _____

Not interested

6. What are the most important topics that you want to know about **game hunting**?

Please select up to 3 topics

Changes to laws

Bag limits

Season times / dates / details

Where I can hunt

Wetland closures

Sustainable and responsible hunting practices

Good hunting techniques

Firearms safety

What GMA is targeting in enforcement

Harvest numbers

Who's who in GMA

Game identification tips

Hunting guides / manuals

Research on game hunting

Educational material, including courses on how to hunt effectively

Something else :Please detail _____

Nothing

7. How **clear** is the information GMA provides about the following topics...

	Not at all	Somewhat	Moderately	Very	Never received any information
Changes to laws					
Bag limits					
Season times / dates / details					
Where I can hunt					
Wetland closures					
Sustainable and responsible hunting practices					
Good hunting techniques					
Firearms safety					
What GMA is targeting in enforcement					
Harvest numbers					
Who's who in GMA					
Game identification tips					
Hunting guides / manuals					
Research on game hunting					
Educational material, including courses on how to hunt effectively					

7a. You indicated in one or more of your answers to the questions about information from GMA that the information was not at all clear or somewhat clear. Please detail why you have chosen this answer/s.

Your interests

8. What are the main interests you have in relation to game hunting and game management in Victoria?

Select all that apply

Knowing the laws

Education on being a more effective hunter

How to deal with illegal hunters

Media about hunting

Keeping up to date with seasonal changes

Knowing if I'm in a legal hunting location

Accessing public wetlands that are surrounded by private property

Other :Please detail _____

9. What is the main thing you want to tell GMA about how it communicates with Game Licence holders?

10. What would you like to experience more of in game hunting or game management?

About you

The next few questions are about you. Your answers will not be used to identify you personally, but will help us to understand more about who our hunters are, analyse results and understand the views of different groups of people.

11. In the last 12 months, what did you hunt for in Victoria?

Select all that apply

Deer – stalking

Deer – hounds

Duck

Quail

Pest

I didn't hunt in the last 12 months

12. How many years have you had a Victorian Game Licence?

If you have missed some years, just add up the number of years that you have actually had a licence.

If you can't remember exactly, choose a number that's probably close.

Less than 1

1 - 2

3 - 5

6 - 7

8 - 9

10 - 15

16 - 20

More than 20

13. In the last year, did you speak a language other than English at home?

This is so that we can find out the common languages other than English that we should consider publishing our information in.

Yes

No

14. What was the main language other than English that you spoke at home?

TM Arabic (incl Lebanese)

TM Cantonese

TM Croatian

TM French

TM German

TM Greek

TM Hindi

TM Indonesian

TM Italian

TM Maltese

TM Mandarin

TM Polish

TM Russian

TM Serbian

TM Spanish

TM Tagalog

TM Tamil

TM Vietnamese

TM Other :Please specify other language_____

15. Are you a member of:

Select all that apply

Hunting organisation or club

Hunting-related social media community, like forums, blogs, Facebook, Instagram, Twitter, etc.

Another type of hunting-related group :Please
detail _____

None of the above

