

# Training Needs Analysis for the Bass Coast Landcare Network



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## 1 SUMMARY

In 2013 BCLN received funding from the Commonwealth Government for a project titled 'Peer to Peer learning - local Bass Coast farmers finding solutions'. This Training Needs Analysis covers one component of this project, and builds on the education strategy that was completed in 2010. The Training Needs Analysis involved re-surveying landholders to measure their current interest and to look at gaps in what is currently available, in order to develop new, relevant training opportunities.

Compared to the 2010 Education strategy, this time more landholders were surveyed from a wider demographic (including farm discussion groups, the French Island Landcare group committee and BCLN members who have provided email addresses, via survey monkey). The survey method was also improved, including an electronic survey completed by half the respondents.

The region wide training calendar has now been compiled for 2010, 2011, 2012 and 2014.

All the available feedback on events run over the last few years, both from separate BCLN events and from training run as part of the Land Stewardship project, was compiled.

Ideas for the farm discussion groups are included, gained from facilitated discussions with group members.

Weed control and managing pastures were the most popular choices for future works planned, followed by pest animal control, revegetation, managing soils biologically and general fencing.

Managing pastures and weed control were the most popular topics of future interest as well (this result was the same in 2010), followed by coping with extremes in climate, pest animal control and improving the health of your bush. Managing soils biologically was also of interest. There was a substantial decline in interest in topics such as nutrient management, water planning and agricultural greenhouse gases.

When considering the method of delivery, the five most popular options included four ways to learn about managing pastures - field days, digital information, training courses and farm discussion groups, along with interest in digital information on weed control.

Improvements are suggested for the BCLN website, including listing information by topic, and providing more digital information on the topics of interest, including managing pastures, weed and pest animal control, managing soils biologically, improving the health of my bushland and coping with extremes in climate.

BCLN staff were surveyed and their ideas for the training program were incorporated into the recommendations.

BCLN training currently planned for 2014 is detailed.

Training gaps between topics/methods of interest and what is currently available either from BCLN or other providers are identified. These include:

- more on managing pastures, using all training methods, more on weed control and pest animal control, more on coping with extremes in climate, financial management/legalities/insurance etc., digital information and handouts on revegetation, information on farm safety and on looking after each others' health in challenging times.

Relevant ideas from the 'reaching the hard to reach' project are identified, including using case studies/field days that target traditional farmers, using all the sources farmers use, being aware of the triggers that shift farmers from browsing to researching, offering local learning and using personal pride in property appearance to market training events.

Lessons learned from the Land Stewardship project are identified.

Detailed recommendations are provided on training ideas for each topic of interest, and a possible training framework for 2014 is included.

## **2 INTRODUCTION**

### **2.1 Project Background**

As a Community of Practice, the Bass Coast Landcare Network provides opportunities for landholders to learn with and from each other, on the pathway to land stewardship. In the past BCLN has provided training opportunities to landholders on a series of topics and in a range of different formats.

There are also a large number of other organisations and private providers within the BCLN region who offer education and training on a wide range of topics of interest to rural landholders. BCLN is keen to avoid duplication and to ensure the best training outcomes are achieved with the limited funds available.

In 2010, BCLN commissioned Cassie Wright (Nature Matters) to undertake a review of education opportunities available to landholders in the BCLN region. This involved surveying the participants who attended a series of 'Whole Farm Planning Update' workshops. Participants were asked what land management practices they are likely to undertake on their properties over the next few years, and what topics they are interested in learning more about, along with their preferred learning methods. A series of fact sheets and a calendar were also produced, documenting the various land management and farming related training opportunities offered by all providers across the region. The fact sheets and calendar were also shared with the South Gippsland and Westernport Catchment Landcare networks. The report 'Review of education opportunities for farmers across the Bass Coast region' (Wright and Mackay 2010) analysed this information, looked at how BCLN could best fill the gaps between training needed and currently available, and recommended a series of topics and programs for 2011 and beyond.

In 2013 BCLN received funding from the Commonwealth government, through the Department of Agriculture, Fisheries and Forestry under the Sustainable Agriculture stream of Caring for our Country, for a project titled 'Peer to Peer learning - local Bass Coast farmers finding solutions'. This report covers one component of this project - a training needs analysis, which involved re-surveying landholders to measure their current interest and to look at gaps in what is currently available, in order to develop new, relevant training opportunities.

### **2.2 Objectives**

The objectives of the training need analysis are to:

- Survey BCLN members on topics they are interested in learning more about, preferred learning methods, and on the land management areas in which they are likely to undertake works in the future
- Compare 2010 and 2014 survey results
- Survey BCLN staff for their ideas on the current BCLN education program and ideas for the future
- Develop and distribute a training calendar and fact sheets on training courses currently available to landholders in the BCLN and surrounding area
- Undertake a gap analysis on training opportunities in the BCLN area
- Prepare a report for with recommendations on future focus areas for education & training
- Note that the scope of this project included reviewing all education and training for rural landholders. It doesn't include the Urban Landcare groups, or the Environmental Detectives program BCLN carries out with school children.

### 3 METHOD

Data was gathered for the 'Peer to Peer learning - local Bass Coast farmers finding solutions' from a range of sources. These included:

<b>Source</b>	<b>Method</b>
The three farmer discussion groups supported by BCLN	<b>Survey, Feedback on training and Ideas for discussion group</b> Meetings of the three farmer discussion groups supported by BCLN were attended in November/December 2013. During a facilitated discussion at each meeting we asked members for their ideas on topics and locations they'd like to visit, along with their feedback on any courses or field days they had attended over the last few years. They also completed a hard-copy survey (with 28 surveys completed) looking at works they were likely to undertake on their property over the next few years, as well as topics they were interested in learning more about, and their preferred learning method (see Appendix 2 for survey questions).
Landcare group committee members	<b>Survey</b> BCLN Landcare facilitators were asked to take the survey to their group meetings and ask the committee members to complete it. Unfortunately due to the project work falling over the Christmas period the only surveys returned were six from the French Island group.
BCLN members generally	<b>Survey</b> The survey was also converted into an electronic document and emailed to the 365 BCLN members who have provided their email address. There are 893 active members on the BCLN database, so the survey was emailed to 41% of members. Thirty one responses were received.
BCLN staff	<b>Staff survey</b> BCLN staff were also surveyed for their ideas on the education activities for rural landholders carried out by the network.
Past field day and Land Stewardship training attendees	<b>Feedback on training</b> Feedback sheets from two field days were analysed, and training feedback information was also gained from the 2011 and 2012 monitoring and evaluation reports for the Land Stewardship Project (Wright 2011, Bartlett 2012) and the 2013 review of the Land Stewardship Project (Colliver and Wright 2013).

#### **Limitations of survey results**

It should be kept in mind that it is likely that the majority of surveys were completed by landholders who are highly motivated and are mostly members of Landcare (other than a few discussion group members who aren't Landcare members). They were either members of a farm discussion group, the French Island Landcare group committee, or received the email and decided to take the survey electronically. As such, the results are likely to be different from those that would be received if it had been possible to take a cross section of the landholders in the Bass Coast community.

The members of the farm discussion groups and the Landcare committee completed the survey because we attended their meeting and asked them to fill it in. Those who completed the online survey are likely to have a stronger interest in training, as they took the time to complete it without anyone encouraging them in person.

## **4 RESULTS AND DISCUSSION**

### **4.1 Landcare training delivered 2011-2013**

#### **4.1.1 Summary of BCLN courses/field days**

BCLN ran a diverse range of events, training days and courses over 2011, 2012 and 2013. These included:

- Discussion group meetings: 4 per year for the dairy group (started 2013), 6 per year for the Kongwak EliPac Beefcheque group and the Phillip Island Better Beef group respectively
- Six farm tour days, most of these included awards ceremonies, either network wide or for one Landcare group
- Eight field days (topics were: Pesti virus, Farm scale composting, Healthy soils, waterways and Westernport, Carbon farming and demystifying lime, Better beef less worms, Monitoring, How to set up your farm soil trial and interpret, and Understanding effective microorganism technology)
- Eight 'Seeds to plants' workshops on seed collection and propagation
- Two movie nights hosted by Phillip Island Landcare Group
- Four pest animal field days and one weeds field day
- One soils course - Soil health and fertility management with Chris Alenson (three session course)
- Nine sessions primarily run for Urban Landcare groups, although open to all (ranging from water wise and indigenous gardening to plant identification and tour of reserves and gardens)
- A session on volunteer recruitment
- 25 yrs of Landcare arts challenge
- Attending various community open days to promote Landcare

#### **4.1.2 Feedback on Bass Coast Landcare Network events**

##### **Landslips Bus tour November 2012**

Feedback sheets were received from 18 attendees, and fifty-five percent said they intend to try new practices based on the information they have gained recently. These included: taking more notice of drainage, extending biological aspects of soil health, increasing wastewater application for tree plantation, dam fencing, reticulate water and vegetation, address land slips, manage pasture/stocking more effectively, restore pastures and paddocks.

##### **Farmers make more from healthy soils field day, November 2011**

Feedback sheets were received from twenty four attendees, and forty-six percent said they intend to try new practices based on the information they have gained recently. These included: liming (applying calculator), more revegetation around waterways, soil testing (and liming), carbon farming, liming additional areas, more emphasis on aeration, soil testing, sorting out root mat issues.

##### **Farm scale composting**

Feedback was received through conversations with the farm discussion groups. People liked seeing the machine and were quite interested, however thought it was a high cost alternative. They said it is hard to get the materials, and you need a big area to do it.

#### **4.1.3 Feedback on training delivered by Land Stewardship Project**

Training delivered as part of the Land Stewardship Project included whole farm planning courses (FarmPlan21 and the electronic course ifarm) along with soils courses delivered by external providers including Vital Soils (Sonia Lee) and by Chris Alenson, plus various individual field days.

The following feedback is from some of these courses and events run as part of the Land Stewardship Project. As this project was run in partnership with the Westernport Landcare Network and the South Gippsland Landcare network, responses were received from landholders across the three network areas.

##### **'Extended Grazing Trial Producing Healthy Soil Outcomes' field day, May 2011 (Wright 2011)**

The best aspects of the event were the speakers, in particular Graeme Hand's talk (43%). People also appreciated the chance to network, to hear an alternative view, to see Lee's farm and the paddock-to-plate lunch. Suggestions for improvements included more financial information, more time for Graeme to speak and a larger or closer projector screen.

When asked how useful the event was for you, the average response was 8/10, and when considering the quality of the event the average response was 8.5/10.

Participants said they would use the information learned to do soil health checks, trial some of the new concepts, tell others what they had learned, reintroduce native grasses and to try and implement longer rotations. They would like further information or events on native grasses, how to manage flat boggy land, more of the same, including more detail on how long to rest paddocks and how long to graze, more data on outcomes and profit from early adopters and soil health, function and performance comparisons

### **Feedback on the soils component of the Land Stewardship Project by participants in 2012 (Bartlett 2012)**

Landholders said they liked how the soil training courses: answered all my questions, provided a good general introduction and a chance to share knowledge, the broad and comprehensive overview of soil health and management, enjoyed the practical field component and said courses run on weekdays/weekends enabled them to attend. They said having a soil test present at the course enabled them to question the presenter about the specific test, and that Chris Alenson's course was great for new people. In addition, members of the Kongwak EliPac beefcheque group also liked Chris's course. Sonis Lee's Vital soils course was found to be good but not very practical, however the lime calculator was great.

Negative feedback included that courses were too scientific, that more follow up was required, it was hard to apply to your own property, and there wasn't enough explanation of soil tests at training courses. They said the timing of courses and funding cycle needs to be better organised and that courses need to be held before site visits occurred so people had greater base information at beginning. In addition, members of the Phillip Island and Kongwak EliPac discussion groups said the Vital Soils courses with Sonia Lee were very scientific and there was too much information to remember.

### **FarmPlan21 and iFarm feedback during the 2010/11 Land Stewardship Project (Wright 2011)**

Seventeen feedback sheets were received from participants in the FarmPlan 21 course, delivered by DPI on behalf of the Land Stewardship project. All participants asked said they had learnt something that they will use on their property.

People listed a range of things that they found most valuable about the course, including: iFarm, pasture and soil, evaluating and setting up your farm, interaction with others, the aerial map, ability to map my current and future plans, grazing stock on pasture and learning types of soils and grasses. People valued operating their farm using land classing, and combining this with wind and water considerations to plan shelterbelts and troughs, that it showed areas that needed improvement, and helped with prioritising and farm layout.

Suggestions to improve the course included expanding on the pasture and weed identification, getting more organic matter into soils, more information on soil test interpretation, including pasture content, more on carbon, less on legals and more on chemicals and farm visits.

Other topics participants would like to learn about include:

- production efficiency, marketing, costings
- Composting/compost teas, fertilising sustainably, beef cattle welfare, pasture & weed mgmt - what's good and what's not
- Pasture/fertiliser, tree planting - grants available, how to source them
- Pasture management/grazing
- Nutritional values from various feed types
- Financial planning/taxation for primary producers
- Optimising beef production
- Animal health for small farmers
- Methane gas, types of paddock grasses

Feedback sheets are not usually collected from iFarm participants however two were collected from participants at the iFarm course held on French Island. They valued accessing a recent aerial map, having a practical demonstration of the program and learning about mapping distances and areas, soil types, calculating volumes of dams and creating a map of their properties. Suggestions for improvements included being able to use other parts of the program (e.g. livestock data), more time to practice and sort out individual issues with the program.

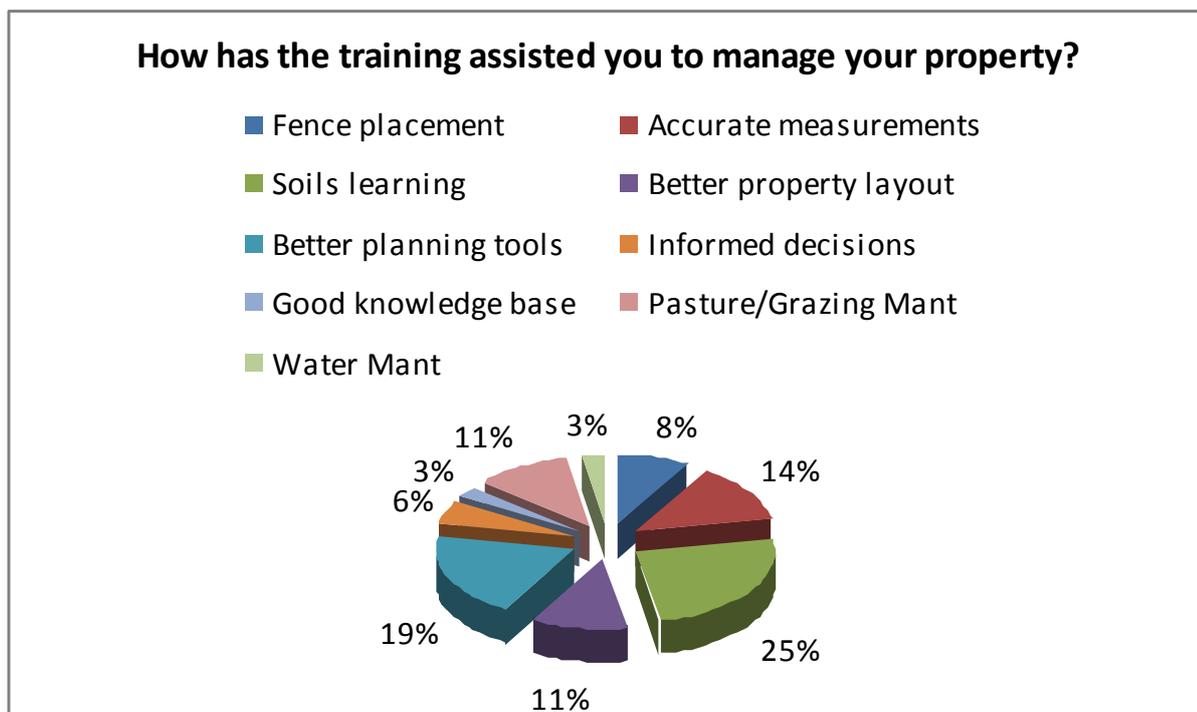
Members of the Phillip Island and Kongwak EliPac discussion groups also did the iFarm course. Some said the computer component was too hard, where as others loved it and still use it.

**Feedback on Land Stewardship farm planning training 2009-12** (Colliver and Wright 2013)

DPI conducted participant evaluation of the Land Stewardship project training in farm planning for the three years 2009-12. Past participants were surveyed in November 2012. Of 25 respondents:

- 83% had found the training useful in managing or making changes on their property, and 68% had identified new opportunities in the way they managed their property
- soil health was the single most significant area of learning, but better planning tools and the ability to accurately measure aspects of a property were also significant

**Figure 1. Impact of the Land Stewardship Project training on property management, 2009-12**



- on average, participants said their knowledge had increased 30%, and 98% thought the information offered was relevant;
- a major benefit was the tools provided to accurately measure areas and therefore quantities for fencing, pasture management, soil and water management, and revegetation.

#### 4.1.4 Proposed training from 2010 not delivered

In the 2010 Education review a proposed training framework listed field days and courses to be run (Wright and Mackay 2010). The following table explains those that weren't run and why.

<b>Topic</b>	<b>Reason</b>
Farm Plan 21, iFarm, efarmer	These courses were run through DPI for the Land Stewardship Project. There was insufficient landholder interest to run them in the BCLN area, however they were run in the wider stewardship project area with some BCLN members participating.
Salinity field day including latest techniques and groundwater flows	Funding for the salinity project was discontinued, as funding across Victoria for salinity works generally was reduced.
Farm plan review session	No funding was able to be sourced for this.
Solutions at the source	This course was replaced by Farm Plan 21.
Water management course	Funding was applied for but the application was unsuccessful, BCLN is now applying again to the state government for funding to run this course.
Vital Soils courses	Soils courses were run, however they were through a different provider (Chris Alenson)
Nutrient budgeting	Due to BCLN staff changes this course wasn't run
Vegetation and habitat management course	Planning for this course is currently underway, and the course will be offered in 2014, and will be called Managing projects and vegetation on your farm

## 4.2 Ideas for discussion groups

### **Kongwak-ElliPak BeefCheque group**

During a facilitated discussion, the members of this group identified the following topics of interest:

- Mental health, how to know if someone is struggling and help look after your neighbours
- Sustainable farming
- Software to handle animal breeding records
- Morwell tip – were doing commercial composting, would be good to hear an update
- Profitable farming, keen to visit locations and see what people are doing, but interested in people who make their whole income from the farm, not hobby farmers
- Would like to visit other farms, the Elders Charlton feedlot

### **Dairy Discussion Group**

As we attended their Christmas social meeting, there wasn't time for a full discussion on ideas for the group, however the following ideas were mentioned. It was arranged for the BCLN training co-ordinator to meet with the group in 2014 to help them plan their future sessions.

- Run a chemical users course update
- Look into running a whole farm planning course for this group, as most members are yet to do one
- When the course/field days from the last few years were mentioned many said they were interested but hadn't heard about them. The group members will be added to the training email list to ensure they hear about future programs.
- Were interested in the soil health and fertility course, and in the possibility of doing it as a group
- During the week is the best time for dairy farmers (often have sport on weekends), mid week between 10am and 3pm is good. Dairy group currently meet on Wednesdays.
- Would like to visit other farms, see other types of cows, organic set ups, etc.

### **Phillip Island Better Beef**

During a facilitated discussion, the members of this group identified the following topics of interest for field days:

- Farm insurance – what is realistic, differences in policy
- Farm machinery safety/OHS/chainsaws/quad bikes
- Time management
- Tour days to other areas, e.g. French Island
- Climate change, Richard Eckhart, Govt advisor
- Alternative farming – diversification
- Co-operative farming
- Community supported agriculture
- Our native pests – wallabies, Cape Barron Geese
- Soil carbon – Lardner park – Westernport Landcare network, Peter Ronalds
- Financial management and succession planning (group agreed this was probably better to be run by VFF)
- Animal health, and Marketing (group agreed probably better run by DEPI)
- They thought it was good to have a side attraction at field days e.g. Simon Parks machinery
- And suggested that some field days could be repeated every 2-3 yrs

### 4.3 Landholder responses on future works planned & topics of interest

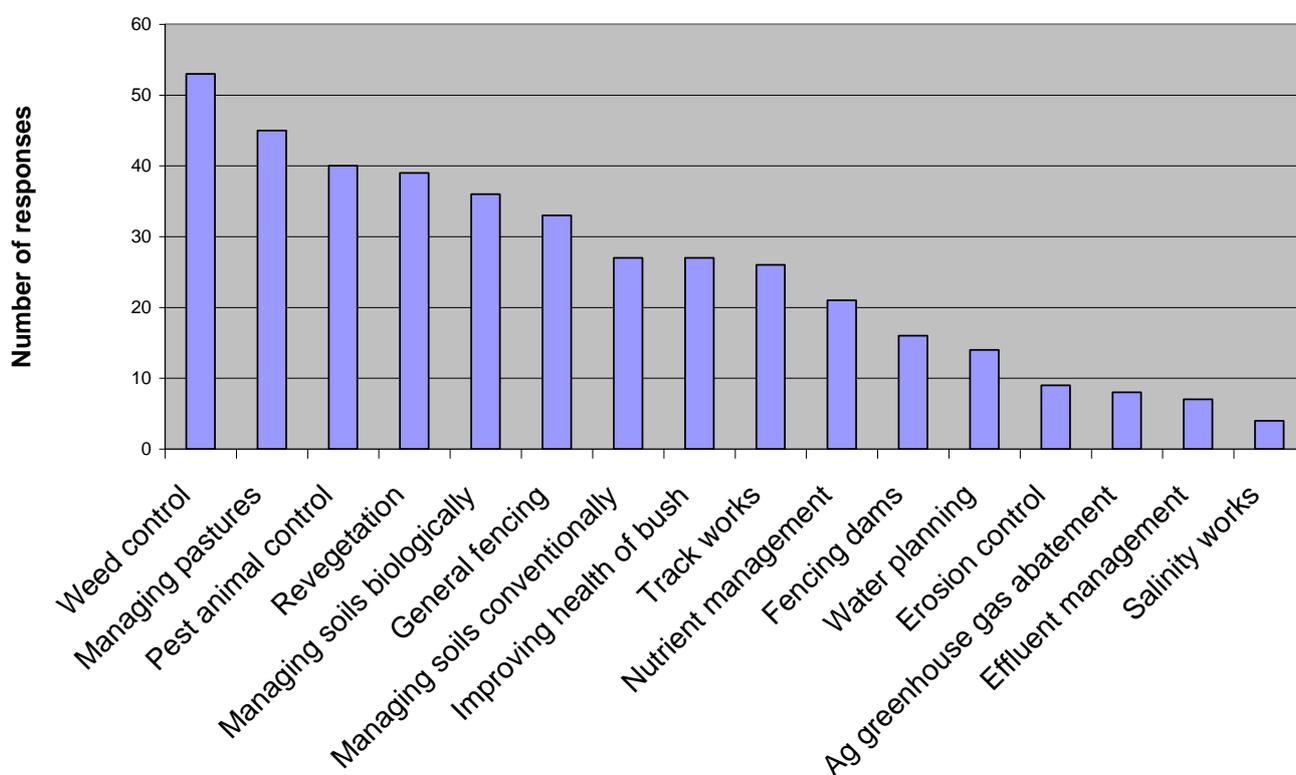
#### 4.3.1 Future works planned

In response to the 2014 member survey question 'What works do you have planned for your property over the next few years?' respondents identified the following farm management practices (see Figure 2).

As detailed in section 3.1, the following results are the combined survey responses (sixty five in total) from landholders at farm discussion group meetings (28), the French Island Landcare group meeting (6), and electronically via survey monkey, through an email sent to BCLN members (31).

Weed control was selected by 82% of respondents, followed by managing pastures (69%), pest animal control (62%) and revegetation (60%). Managing soils biologically was also a popular response at 55%, as was general fencing (50%).

**Figure 2. Future works planned (2014 survey)**



### **Comparison between 2010 and 2014 survey methods for future works planned**

There were 65 surveys completed in 2014, substantially more than the 23 returned in 2010. The survey method used varied as well. In 2010 participants attending whole farm planning update sessions were asked 'What works do you have planned' as part of a series of questions about their whole farm plan (including what works did you identify during your course, what works have you completed since doing your course, what works do you have planned, how did the course assist you, have you undertaken any monitoring).

In 2014 landholders were given a table with the farm management practices listed, and asked to tick works they plan to do over the next few years.

The different methods are likely to have affected the results, as 2010 respondents were thinking about future works planned in the context of works identified during their whole farm planning course, that were yet to be completed. By contrast, the 2014 respondents weren't thinking in the context of whole farm planning, and were presented with a list, which may have prompted them to select items that they wouldn't necessarily have thought of otherwise.

### **Comparison between 2010 and 2014 results for future works planned**

Managing pastures was the second most popular response both times (69% in 2014 and 43% in 2010). This isn't surprising as it is a core farming practice. Sixty percent chose revegetation in 2014, and 74% in 2010, again this makes sense as the respondents were involved with Landcare, where revegetation is a key activity.

Weed control was selected by 82% in 2014, and only 17% in 2010. It seems likely that the different survey method contributed to this difference, as the 2010 responses were more along the line of 'projects' identified during the whole farm plan, as opposed to ongoing maintenance issues like weed control. This may also explain why pest animal control was chosen by 62% in 2014, but only 9% in 2010, and general fencing by 50% in 2014 and only 4% in 2010.

### 4.3.2 Topics of Interest

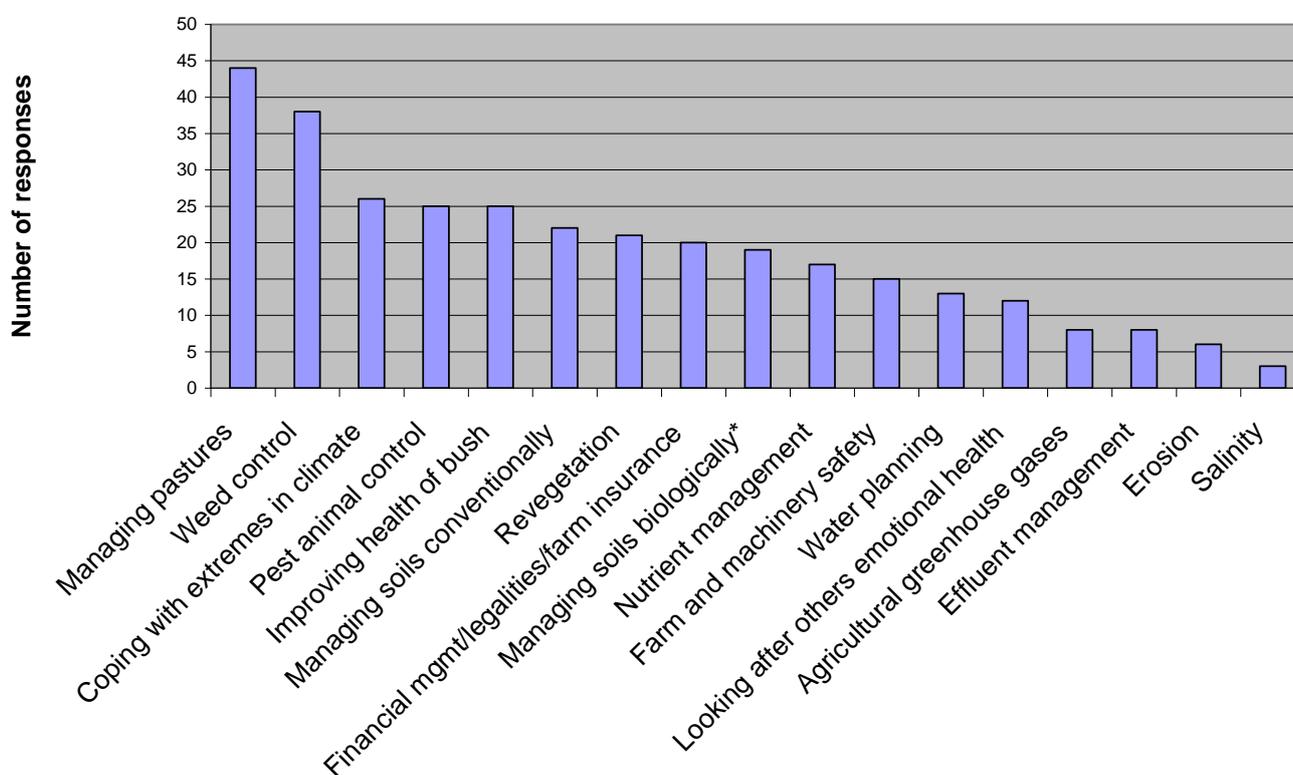
Survey participants were provided with a list of topics, and asked to tick those they are interested in, and the ways they would like to learn about them. Methods included handouts, digital information (e.g. CD or website), field days, training courses or farm discussion groups.

Sixty responses were received to this question, from landholders at farm discussion group meetings (28), the French Island Landcare group meeting (6), and electronically via survey monkey (26).

The most popular topics were managing pastures (73%) and weed control (63%). These were followed by coping with extremes in climate (43%), and pest animal control and improving the health of your bush (both 42%). Also popular were managing soils conventionally (35%), revegetation (35%) and financial management/legalities/farm insurance (33%).

Unfortunately an error was made when entering the survey into the electronic online 'Survey monkey' program, and the option 'Managing soils biologically' was left out of the list of options. Managing soils biologically was selected by 56% of respondents who filled out the hard copy survey, however those completing the electronic survey were unable to choose it, thus it was only selected by 32% when averaged across the whole group.

**Figure 3. Topics of future interest (2014 survey)**



### Comparison between 2010 and 2014 results

There were 60 surveys completed in 2014, substantially more than the 23 returned in 2010. The survey method used was very similar, enabling a more accurate comparison than with the 'works planned'. The main difference was the addition of some new topics to choose from in 2014, these were: coping with extremes in climate (e.g. drought, very wet years), financial management/legalities/farm insurance etc. and looking after each other's emotional health in challenging times.

Managing pastures was the most popular topic in 2010 and 2014.

Weed control was second most popular in 2014. In 2010 the participants were given the choice of weed control in pasture or weed control in bush, and some circled both. This made the data hard to interpret, however it seemed likely that had the weed control topics been combined then it would have been one of the topics of highest interest in 2010 as well.

Managing soils biologically was the third most popular choice in 2010. It seems likely that this would have been the case again in 2014, based on the hard copy results, if it hadn't been accidentally left off the list of options in the electronic survey.

The new topics listed in 2014 were also of interest, particularly coping with extremes in climate and financial management/legalities/farm insurance etc.

There was a substantial decline in interest in topics such as nutrient management (28% in 2014 from 70% in 2010), water planning (22% in 2014 from 65% in 2010) and agricultural greenhouse gases (13% in 2014 from 61% in 2010).

Pest animal control, improving the health of bush, managing soil conventionally and revegetation remained of interest to many respondents.

Salinity, erosion and effluent management were the least popular choices in both 2010 and 2014.

### 4.3.3 Topics of interest – most popular methods of delivery

Along with topic, respondents selected their preferred methods of delivery on the topics of interest from the following: handouts, digital information (e.g. CD or website), field days, training courses or farm discussion groups.

There were a wide range of responses given, with only 4 of the 85 possible options not selected by anyone (these were erosion via farm discussion group, handouts or training courses in salinity and training course in looking after each others emotional health in challenging times).

The five most popular options included four ways to learn about managing pastures - field day (26 responses), digital information (21), training course (17) and farm discussion group (17), along with interest in digital information on weed control (21).

The following table lists all combinations of topic and method that received at least ten responses.

Topic	Method	No. responses
Managing pastures	Field day	26
	Digital information	21
	Training course	17
	Farm discussion group	17
	Handouts	11
Weed control	Digital information	21
	Handouts	14
	Field day	11
	Farm discussion group	12
Managing soils biologically *	Field day	12*
	Farm discussion group	11*
	Handout*	6*
	Digital information*	6*
	Training course*	7*
Improving the health of my bushland	Digital	14
	Field day	13
Pest animal control	Handouts	10
	Digital	11
Coping with extremes in climate (e.g. wet years, drought)	Digital	10
	Farm discussion group	10
Financial management/legalities/insurance etc.	Farm discussion group	10

\*NOTE: the numbers for managing soils biologically would probably have been higher had survey monkey column not been left out. Managing soils biologically via handout (6 responses), digital info (6) and training course (7) would probably have received more than 10 responses as well, so have been included in the table.

### **Comparison between 2010 and 2014 results**

There are significant differences between the methods and topics respondents chose in 2010 and 2014.

- Managing pastures was popular in 2010 but even more so in 2014, accounting for four of the five most popular choices.
- Managing soils biologically is still of interest, however due to it being left off the list of options in the survey monkey survey it is hard to quantify just how popular each option would be.
- The new topics of coping with extremes in climate and financial management/legalities/insurance were of interest, via digital information and through farmer discussion groups.
- Interest in pest animal control and weed control has increased
- Water planning and Agricultural Greenhouse gas were some of the most popular choices in 2010, however in 2014 they barely registered, with only water planning via digital information (8) and field day (6) receiving more than 5 selections. No Agricultural greenhouse gas options were chosen by more than 5 respondents. There was still some interest in nutrient management, but much less than in 2010.
- In 2010 there was more interest in handouts than digital information, however in 2014 for nearly all topics more people chose digital than handouts. So while there appears to be a trend towards more interest in digital information, this may be due to the different survey method used, with half the surveys completed electronically by people who obviously use computers, whereas in 2010 all were done by hard copy during workshops. None the less, it indicates there is an audience interested in digital information about farm practices.

### **4.4 Interest in on-farm trials**

Respondents were asked 'is there something you would like to trial on your property?' and also 'If there is something you are interested in trialling, what would you need to help you make it happen? (e.g. financial assistance, training, field days to see how others have done it, etc.)'.

Responses received include:

<b>Is there something you would like to trial?</b>	<b>What do you need to make it happen?</b>
Aeration methods or soil management -alternative fertilizers (biological not chemical)	Financial assistance
Trialling new or alternative fertilisers and/or soil management techniques	Fields days to see how others are tackling issues and to help form ideas of what I might undertake/investigate
Diversifying farm enterprise .... Native Bush Foods	Knowledge ...contact with others that have done it before
Already trialling compost as a remedy to root mat. Have two heaps 100m long.	Landcare is helping with the funding to the value of \$3000.
We're open to any new innovations to do with management or fertilizer trials	Training, financial assistance etc
Wind energy effluent options	Everything is time and money
New or alternative fertilisers, diversifying your farm enterprise, establishing a niche enterprise e.g. farm stay - ecotourism.	Advice, financial assistance
Adding bio-diversity to soils. Niche Enterprises.	
Aerator	
Compost. Rotational crops in pastures	
Comfrey as nutrient/fertiliser, leading to possibility in strip planting	

## 4.5 Staff surveys

BCLN staff provided the following feedback on the BCLN training program:

### **Do you have any ideas of other things we could run (this could include topics we could cover, field days, courses, farmer discussion groups, online information or training, or anything else)?**

- Pugging field day, pasture production field day, case studies on economic benefits of Landcare activities
- Sustainability on farm, maybe in conjunction with Energy Innovation Co-operative, power generation
- Discussion groups, tours and case studies are always well received. Harnessing the landholders involved in Peter Ronalds project (Demonstrating Sustainable Farm Practices in Westerport, Port Phillip and Yarra Catchments project).
- Agricultural Chemical Users Permit training course, weed and feral animal workshops
- Environmental monitoring, farm health indicators leading to farm health
- Farm diversification, land capability study and opportunities, horticulture, i.e. Peninsula avocados. Working with Melbourne University and their research into diversification. A farmer discussion groups around this would be great to provide support for change. There is also an opportunity for local government to invest in research and trials.

### **Have you heard landholders or others in the community suggesting a need for any kind of training, if so what?**

- Whole farm planning for new landholders (3 suggestions)
- Revegetation techniques, direct seeding
- Evolving soils courses with Chris Alenson, linked with new trials etc.
- ACUPs and spraying related days
- Kongwak species identification, specific to their EVCs
- Southern Otways Landcare Network have suggested we could work together to run a technical session with Graham Hand on his regenerative agricultural practices (based on no-input rotational grazing), in relation to steep land. Graham is running 2 sessions in the Otways on 27-28 June.

### **Have you heard any feedback from landholders or others in the community on any training we've run over the last few years?**

- Have heard good feedback on all events/training opportunities
- Great feedback on old EBMP course and on Environmental Detectives (program for schools)
- Soils courses always well received with Chris Alenson
- Landholders love quick (10am-2pm max), informative and interesting hands on days
- Composting farm scale, robotic dairy industry/research
- The benefit of EBMP and the way the Solutions at the Source program was run. The benefit of tours.
- A few groups did want a basic lesson in financials which Michaela did last year. They were happy with this training.

### **Do you think there are any topics that we should leave for a while, that have been done to death?**

- Monitoring days over last couple of year have had low attendance
- We have done a lot of ifarm and soils training in the last few years, need to be careful not to oversaturate
- No I think we have a good balance of topics

### **Any other ideas or comments about our education program?**

- Don't over saturate. Link with other programs. Ongoing support for past participants.
- I think it is travelling well, well organized and a team effort. Maybe more days like the monitoring day? (short, sharp, informative and hands on)
- Setting up a calendar of training and field days that are linked in together. Formalised notes for tours.

## **4.6 Training currently available**

### **4.6.1 Region wide training calendar and fact sheets**

In 2009 BCLN developed a list of all training service providers within the region or in neighbouring areas and contacted them requesting details of courses they had planned for the next year. A series of fact sheets detailing the courses and a training calendar was published, and then sent to all landholders within the BCLN network area. It was also shared with neighbouring Landcare networks including South Gippsland, Westernport, Latrobe and Yarram Yarram. It was then updated in 2010, 2011, and 2012.

This calendar has now been updated for 2014 (see Appendix 1) and was sent out to BCLN members in April 2013.

### **4.6.2 BCLN Farm Discussion Groups**

Information on training courses either currently or recently offered by BCLN was provided by Lisa Wangman, BCLN training coordinator. These include:

#### **Farm discussion groups**

##### **Kongwak-Ellipak BeefCheque Group**

Group meetings provide the opportunity for members to learn from each other, different expert guest speakers are invited to each meeting. Members can build on and share previous knowledge relevant to local issues. Lunch is provided. Member annual fee \$75 GST inclusive. Meeting on the second Thursday of February, April, June, August, October and December. Facilitated by Faye Tuchtan.

##### **Phillip Island Better Beef**

This group is led by expert agronomist John Galliène. Meetings provide the opportunity for members to share information and learn from each other with expert guidance. Lunch is provided. This group is now supported by Landcare. Member annual fee \$110 GST inclusive. Meets 6 times a year. Facilitated by Faye Tuchtan.

##### **Dairy Discussion Group**

Each group meeting has expert guest speakers invited. Group members can share information, learn from each other and build on previous knowledge. Topics will be tailored to suit the interests of those attending. Member annual fee \$75 GST inclusive. Meets 4 times a year. Facilitated by Rob Paterson.

##### **French Island Discussion Group**

This group is currently looking at changing its focus and would like more ideas and involvement from French Island properties. There is no fee to join this group, membership is open to any Landcare member.

### 4.6.3 BCLN training courses and field days scheduled for 2014

The following table has been compiled from BCLN staff with information available at the time of writing. More courses, field days and other training will be planned and announced throughout the year as funding becomes available.

Topic	Details
Managing Projects and Vegetation on Your Farm Course	<p>Series of six field day and tour sessions visiting local properties to learn the best ways to manage indigenous vegetation, revegetation or restoration projects on your property. Cost per session is \$25 each or \$100 to attend all sessions. Participants will receive manuals and information on each topic, an aerial map of their property (if booking into more than one session), bus trips to local properties and lunch is included.</p> <p>Topics will include; Assessing the health of what you already have, Best Management Practice for planning projects, What are EVC's and what should I plant?, planting techniques, direct seeding, fencing, weed management, and much, much more. For new and experienced landholders.</p>
Pest plant and animal control sites, tour of Westernport region <u>aimed at funders and colleagues</u>	A bus trip is proposed to showcase a number of pest plant and animal control sites in the Westernport region (from Tooradin to Phillip Island). A focus will be on rabbit, Fox, Gorse and Boxthorn and Sea Spurge control (as a starting point). The bus trip will stop at 5 sites to observe works, and also hear directly from those involved in the planning and operational side of the works. Aimed at colleagues and funders, not at landholders.
Chemical users permit course	Australian Chemical Users Permit course
Soil Health Field day	Compost Trial at Darryl Hooks
Soil Health Field day	Pasture Cropping at Simon Parkes
Soil Health Field day	Topic to be confirmed, to be run in Bass Catchment
Soils courses	<p>Two soils courses that need to be finished prior to March 2015. Chris Alenson is the preferred deliverer. Details yet to be confirmed. Course may include aspects of soil health and fertility, as in description of previous soils courses below. There is also scope to include aspects of other topics if indicated through this review (such as pasture management, for example).</p> <p><b>Soil health &amp; Soil Fertility Management Course</b></p> <p>Chris Alenson delivers a 3-day course looking at soil fertility and soil health. Topics covered include sustainable agriculture, soil formation, composition and physical properties, biological life in soils, soil sampling and analysis, plant nutrition &amp; fertility management, indicators of soil fertility and carbon management in soils. A field trip to host farms takes participants through soil assessment and the preparation of a soil health plan, with a visit to a demonstration plot as well.</p>
Weeds	Blackberry rust field day
On ground trials	Field days will be held to showcase results of on ground sustainable agriculture and soils trials, dates to be confirmed.

#### 4.6.4 Review by topic – BCLN and region wide training currently available and proposed

##### Topics, preferred methods and training courses by other providers as well as those offered or proposed by BCLN.

Training opportunities categorised using the same topics as the farmers were asked about in the survey, and listed from most popular topics to least popular.

Topic	Preferred methods	Currently available – other providers	BCLN currently offering and proposed	Training Gap Identified
Managing pastures	Field days, digital information, training course, farm discussion groups	Feeding Pastures for Profit, Korumburra, DEPI Forage planning for dairy farmers, Foster, DEPI Develop a soil health and plant nutrition program (for pasture), NCDEA	Beef & Dairy Farm Discussion Groups may cover this topic.	Yes. Staff ideas: pugging field day, pasture production field day, case study on economic benefits of Landcare activities
Weed control	Digital information, handouts, field day, farm discussion groups	FarmPlan21 (DEPI) Ragwort forum, Leongatha, SGLN	Australian Chemical Users Permit course Vegetation & Habitat management course, 6 sessions Blackberry rust field day	Yes Staff ideas: weed and feral animal workshops
Managing soils biologically	Field days, Farm discussion groups, Handouts, digital information and training courses	Soil Health & Soil fertility management course, Mornington Peninsula, Chris Alenson	Compost Trial at Darryl Hooks Pasture Cropping at Simon Parkes Third soils field day in Bass catchment Beef & Dairy Farm Discussion Groups 2 soils courses	No
Pest animal control	Handouts, digital information	Fox control field day, Welshpool, SGLN		Yes Staff ideas: weed and feral animal workshops
Improving the health of my bushland	Digital information, field day	FarmPlan21(DEPI)	Managing Projects and Vegetation on your farm course, 6 sessions which will be run as separate field days	Yes, digital information

<b>Topic</b>	<b>Preferred methods</b>	<b>Currently available – other providers</b>	<b>BCLN currently offering and proposed</b>	<b>Training Gap Identified</b>
Coping with extremes in climate (e.g. wet years, drought)	Handouts, field days, training courses			Yes
Financial management/ legalities/insurance etc.	Handouts, digital information, field days, training courses	Manage small business finances (NCDEA)		Yes
Managing soils conventionally	Handouts, digital information, field days, farm discussion groups	FarmPlan21(DEPI)	Beef & Dairy Farm Discussion Groups	Possibly
Revegetation	All methods		Vegetation & Habitat management course, 6 sessions	Yes, digital information and handouts
Water planning	Digital information, field days		Applying for funding to deliver course – if it runs will be run as a series of field days	No
Nutrient management	Digital information, field days, training courses, farm discussion groups			Possibly, as no other courses available, however limited interest
Farm safety	Handouts, field days, training courses, farm discussion groups			Yes
Looking after each others emotional health in challenging times	Handouts, farm discussion groups			Yes, handouts and farm discussion group sessions

<b>Topic</b>	<b>Preferred methods</b>	<b>Currently available – other providers</b>	<b>BCLN currently offering and proposed</b>	<b>Training Gap Identified</b>
Agricultural greenhouse gases	Very limited interest, no more than 4 respondents per method	BC and SG Councils Agricultural Climate Resilience in Southern Gippsland' project'		No
Erosion	Very limited interest, only 1 or 2 respondents for most methods	FarmPlan21(DEPI) Erosion field day, Foster North, SGLN		No
Effluent management	Very limited interest, no more than 4 respondents per method	EPA standard information Dairying for Tomorrow courses	Dairy discussion group may cover this	No
<b>Other topics</b>		Chemical Use, First Aid, Chainsaw Use, Fencing, Relief Milking, Welding		No
Combination		Certificate and Diploma Courses in Agriculture/Horticulture/Conservation and Land Management (CCG (Leongatha) Franklyn Scholar (Wonthaggi), NCDEA (Warragul))		No
Planning		FarmPlan 21 & iFarm, Pakenham, DEPI Managing horses and planning your property, SGLN Murray Golburn FarmC@re program Burra Foods (DairySAT) NCDEA Develop feeding plans for livestock (Cattle) and Develop an implement a breeding strategy (Dairy Cattle)		Possibly Whole farm planning update sessions

## 4.7 Links to BCLN Strategic Plan

This project is being undertaken as part of BCLN **Strategy 2**, 'Establish a comprehensive Land Stewardship education and training framework',

Objective 2.1 (Provide programs for skills development and education across the Network)

- A course framework is to be developed and training providers and programs established.

It also contributes towards achieving the following strategies and objectives:

**Strategy 1** Strengthen engagement with rural communities

Objective 1.1 Support the activities of Landcare groups

- Ensuring that the Landcare groups are kept informed of network activities and are supported by the staff and the board of the BCLN.

Objective 1.2 Support and strengthen rural communities

- Continue the work of the BCLN in educating and capacity building on issues of climate change, agricultural practice and adapting to the economic environment.

Objective 1.3 Encourage broad community ownership and involvement

- Growing and encouraging the involvement of all community members in Landcare programs.

**Strategy 3** Implement and continue to develop the Targeted Land Stewardship Program

Objective 3.2 Promote productive and sustainable use of land

- Utilise the Land Stewardship Program to promote sustainable land use including matters such as soil health and pasture cover; erosion and salinity control; and the benefits of revegetation in temperature, wind protection, water quality and insect pest control.

Objective 3.3 Promote weed eradication

- Promote weed eradication as a core element of the Land Stewardship Program

Objective 3.4 Promote biodiversity as an important part of sustainable land use

- Ensure the value of plant and animal biodiversity and protection of existing remnant vegetation is factored into the benefits and opportunities of the Land Stewardship Program.

**Strategy 5** Promote new ways of thinking and doing about land management

Objective 5.1 Research, test and promote new land practices.

- Investigate and support initiatives such as climate change adaptation, healthy soils, whole farm water management and planning, and researching the economic value of biodiversity and sustainable land management practices.

## 4.8 Changes in government policy and programs affecting training

There have been substantial changes in government programs and policy at the state and federal level between 2010 and 2014, which have impacted on training happening across the region. Some of these changes include:

### Cuts to TAFE funding.

Victorian TAFE funding cuts were announced in May 2012. "The cuts to TAFE budgets total \$1.2 billion over four years and have resulted in 2400 experienced TAFE teachers losing their jobs, hundreds of courses being shut down and almost 50,000 fewer students enrolling in government-subsidised certificate and diploma programs compared with the same time last year." (Sydney Morning Herald, October 25 2013).

## **Changes relating to the carbon tax and agriculture**

Politically there have been changes at the state and federal level over the last few years, with many of these affecting agriculture. In 2010 the carbon tax was beginning to be talked about (later introduced on 1 July 2012) and there was much interest in whether agriculture would be included and the impact this would have on farmers, and as such farmers were interested in knowing more about agricultural greenhouse gas abatement. In 2014 the current government is focussed on removing the carbon tax and correspondingly the interest in this area from farmers has drastically reduced.

## **Changes to training approaches in the Bass Coast Landcare Network**

“When developing the Solutions at the Source whole farm planning course about a decade ago, BCLN surveyed landholders for their preferred learning processes, and found a strong preference for small groups in which landholders could share and discuss ideas, for facilitated discussion alongside presentations of technical information, and for hands-on experience of practices through farm visits. Peer learning has continued as a feature of the Land Stewardship project training and education” (quote from Colliver and Wright 2013).

The further development of this peer-to-peer approach is particularly evident with the farm discussion groups, which are co-ordinated by local farmers, with support from BCLN staff. Over time, BCLN has moved further towards this peer-to-peer method, rather than a top-down approach.

In an environment where funding programs are always changing, BCLN also takes an opportunistic approach by incorporating at least one field day wherever possible into on-ground projects. This is often run at the end of the project to showcase the results found, and helps extend the reach of the project to more landholders. By doing this BCLN maximises the available resources, and uses a creative approach to enable field days to fulfil a number of different objectives.

## **4.9 Ideas from the ‘Reaching the hard to reach’ project**

In 2011 a sub-project of the Land Stewardship Project was undertaken to improve the participation rates of farmers in areas with the higher levels of nutrient and sediment export to Westernport. These turned out to be traditional dairy and beef farmers using long-established land management practices, who saw no reason to change these practices. The project was titled ‘Reaching the hard-to-reach’ (Colliver and Wright, 2011).

While the research was undertaken across the Land Stewardship project area (which includes parts of the Westernport and South Gippsland Landcare Network areas as well as part of the BCLN area), a number of its findings and recommendations may be able to be used to help BCLN reach a wider audience with its broader education program.

Twenty two traditional and proactive landholders were interviewed and asked what changes they had made recently in their pasture management and use of native vegetation, and how and where they had picked up their new ideas. For each area of practice, they were asked who they regarded as good sources of practical experience and technical information. Their responses provided detail on how traditional farmers gather new ideas (see Appendix 3), which can be used to better target information and promotion.

The results suggest that traditional and proactive farmers are not mutually exclusive types—many respondents were actively investigating some matters in their farm management. Two styles of search were identified. On matters where a practice was not regarded as problematic, farmers browsed, scanning familiar sources to stay in touch with current practice. When a specific practice was seen as a problem or opportunity, farmers shifted to researching, extending the scope of their sources to gather in ideas and information, and testing ideas in action on their farms.

A large proportion of the land in the BCLN network area is owned by traditional farmers, many of whom do not engage with Landcare. If the goal is to involve more traditional farmers in BCLN training programs then recommendations that may be applicable include:

- **Use case studies or run field days that target traditional farmers.**

Often Landcare field days are run on the properties of proactive farmers, and don’t talk about the kind of cautions traditional farmers may have as they consider changes in practice. Where possible case studies (or field days) of farmers should at a minimum ask not just about the problem or opportunity a landholder recognised, but

the farm, family and economic circumstances that prompted recognition of a specific problem or opportunity. Ideally such events could be run on the farms of traditional farmers, or if it is hard to find one showcasing the topic then those who were once traditional and have become proactive through their involvement with Landcare should be asked to describe the early period of their learning, and what led them to see a problem or opportunity. Field day promotions should make it clear that it will be relevant to traditional farmers. E.g. Are you wondering what all the fuss is about with using Lime? Come and hear why John started using Lime, and why he's still using it!

- **Use all the sources that farmers use**, in particular suppliers and contractors who have regular contact with farmers. Appendix 3 lists the sources named by the interviewed farmers. When promoting training programs, using these sources as widely as possible will increase the likelihood of farmers knowing things are on. Newspapers like the Weekly Times and the Gippsland Farmer were widely mentioned. Nearly all respondents use seed and fertiliser suppliers and contractors to hear about the latest ideas. The more active browsers go to field days to pick up what others are doing: "I bump into people at Landmark or at a field day or Peter Notmans, or effluent days." Developing relationships with these suppliers and contractors and where possible advertising programs through them, perhaps through their notice boards, shop windows, websites, but most particularly through encouraging the suppliers themselves to mention it to landholders. Mainstream agricultural extension programs were also mentioned, wherever possible engaging with these programs as discussed above, and having flyers near their stalls at field days for example, will help spread the word.

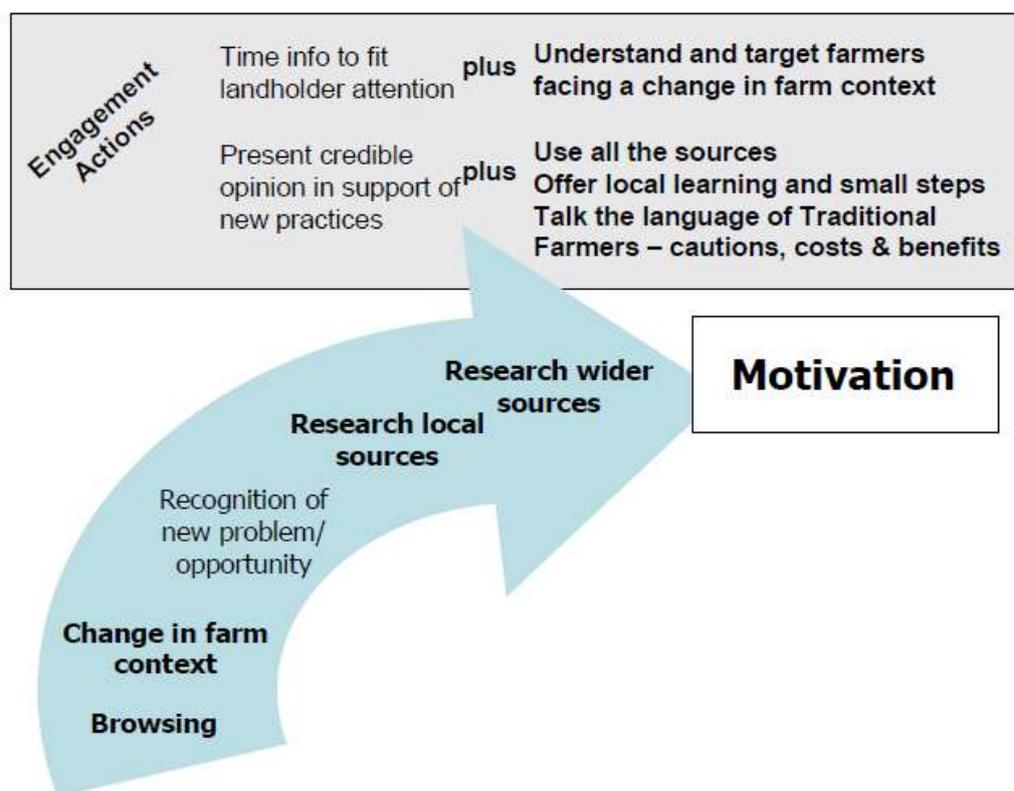
- **Where possible, be aware of the triggers that shift farmers from browsing to researching**, that is from being happy enough with current practices to wanting to search out new ideas, so as to focus on those who are ready for change. For example, run sessions on dealing with problems caused by wet conditions to tracks, drainage and erosion in wet years, or if the price of fertiliser increases this could be a good time to cover alternative (cheaper) sources of fertiliser, or the interest in doing a whole farm plan when buying or taking on a new property (perhaps advertising through the new landholder kit that people get when they buy a property).

- **Offer local learning and make it easy for Traditional Farmers to take small steps as they begin to examine new practices.** Traditional farmers most often used local sources of information, including advice from neighbours, local papers and field days. They also discounted practices coming from non-local places and unfamiliar sources. For example, farmers on steep country said that some of the ideas on pasture and native vegetation they heard about from Landcare seemed more suited to flat country, and beef farmers said that ideas that suited dairy farms would not suit beef farms, and vice versa. So rather than just running one event across the network area, running two or three and tailoring it to the local conditions (e.g. revegetation on steep vs flat land) might reach a wider audience.

When a farmer is taking their first steps, it would be good for Landcare Networks to be able to offer simple, undemanding support. For example, a simple first step for pasture management might be a subsidised or free soil test, or for native vegetation, an offer of tubestock or subsidy for small scale fencing.

- **Use personal pride in property appearance to market events**

One view of Traditional Farmers is that all they care about is money, and that the only way to get through to them is to give them a convincing set of numbers. In our interviews, respondents who had changed their practices only a little still kept a close eye on the condition of their animals and pasture. In our meetings with Landcare groups, members observed that farmers care about the way their animals and pasture look ("Everyone likes to hear how good their cattle are"). Animal nutrition, pasture management, shelter belts and fencing of gullies do in fact mean good looking cattle and properties, not simply more money. Personal pride in the appearance of one's property and stock may be an emotional entry point for Traditional Farmers to consider alternative practices, and marketing training events in this way may bring a wider audience.

**Figure 4. Model of motivation to change (Colliver and Wright 2011)**

## 4.10 Lessons learned from the Land Stewardship Project

### Effect of funding cuts

Joel Geoghegan provided the following update on the Land Stewardship project: "The last two years of the Land Stewardship Project experienced substantial funding cuts. This impacted on all aspects of the project, including the training program. As a result project staff had limited resources available to target and engage landowners and there was less funding for training delivery. The program is no longer funded.

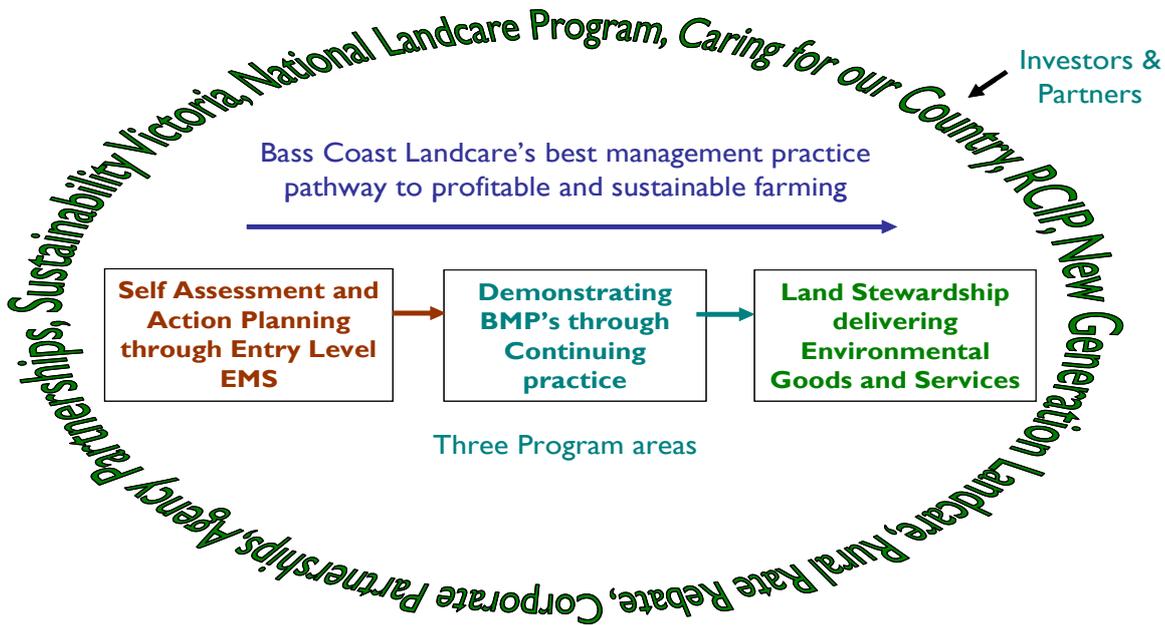
Many of the processes developed and implemented in the project have been carried on and this includes ongoing training for landowners and linking training with on ground project support. For example, the model used with the soils projects is still used with other soils projects now, with the rapid soil assessment tool used, a soil test done, and some agronomist advice given. Vegetation projects still use the computer mapping and assessment tool 'ENSYM' which was developed partly for the stewardship project. "

### The Land Stewardship project method

The Land Stewardship project was a flagship project for BCLN, starting with a trial in 2007, which was then followed by successful implementation and expansion of the project to neighbouring Landcare networks, Westernport and South Gippsland, in 2009. A significant component of the Land Stewardship Program focussed on the training needs of landholders and the support required to aid in their progression along the best practice pathway illustrated in Figure 5 below.

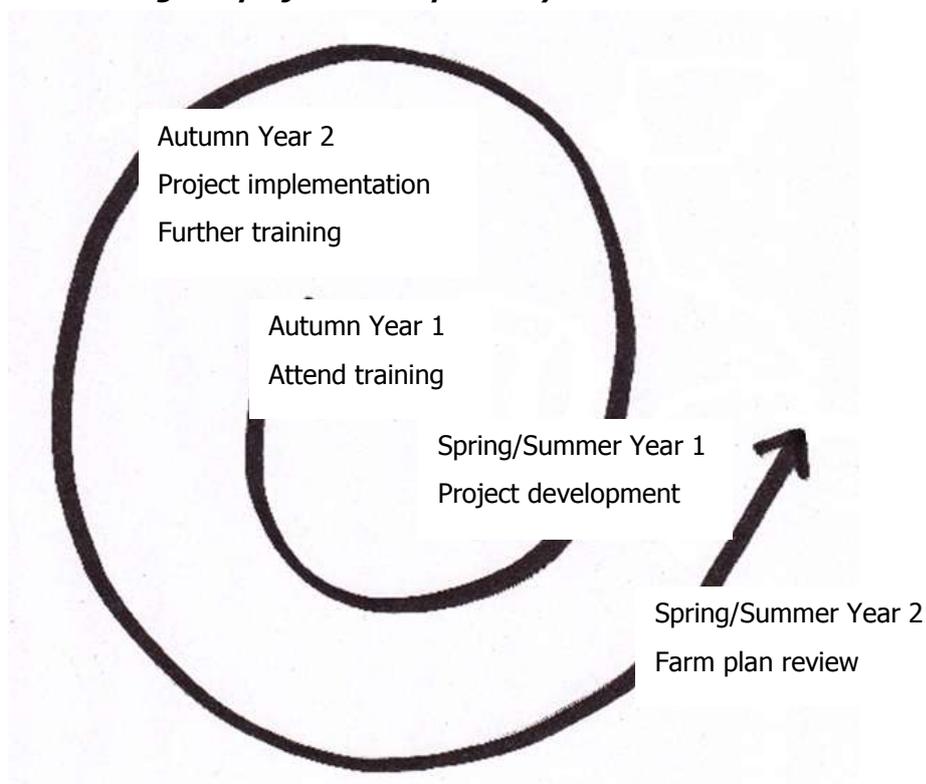
The Land Management Practices Scorecard was used to identify landholder needs in relation to training, planning and on-ground works. Landcare Project Officers worked through the scorecard with landholders during the site visit prior to planning any projects, and then depending on Landholder needs, Project Officers guided them to the most appropriate training or planning opportunities.

Project officers then delivered a single training calendar, with training offered based on their knowledge of landholder interests. This reduced duplication across the region and feedback was used to improve the training to meet landholder needs.



**Figure 5. Best Management Practice pathway to profitable and sustainable farming**

In the early years of the project, all participants were required to have a whole farm plan in place before they were able to take part in the program. If participants do not already have a whole farm plan they were able to undertake a FarmPlan21 course. The following cycle shows the process of training and project development undertaken as part of the Land Stewardship program.

**Figure 6. Training and project development cycle**

In practice there were challenges with this approach, some examples include:

- while initially soil health training was a prerequisite for submitting a soil project, and attending a property planning course was a precursor to doing a vegetation project, for numerous reasons many landholders in 2010-11 weren't able to undertake the training, so in 2011-12 a more flexible approach was used
- delays in approval of funding the Land Stewardship project for the next financial year meant there was a gap between initial site visits and approval of landholder projects, so the right time for some land management actions (e.g. spraying weeds) had passed and those actions had to be held over to the following year

However despite these challenges, advantages of this approach were:

- landholders were supported through a process of identifying their training needs, and training opportunities were provided that met the requirements of people at different stages of the pathway
- training and farm planning was timed (wherever possible) to coincide with project cycles
- training was delivered in a co-ordinated way by the three neighbouring Landcare networks

#### **4.10.1 Lessons learned and processes carried on from the Land Stewardship project**

##### **Recommendations from the Land Stewardship Review 2013 that are relevant to training**

At the start of the Land Stewardship Project it was anticipated that training would be offered to fit three levels of skill in land management – entry, continuing practice and master land steward. In the event, the Project team found that those at each level drew out of the training on offer what was most relevant to their interests and level of knowledge. More experienced land managers seem to benefit from time with similarly experienced peers, and inexperienced land managers value access to experienced land managers. The design of learning activities needs to take account of these needs.

The Project's systematic approach to practice change lies mainly in its tailoring of a comprehensive range of supports for practice change—initial communication about the Project, education and training, peer learning, tenders and incentives—to fit landholders. Because it uses Project staff working with landholders in local communities, drawing on Landcare group knowledge, the Land Stewardship Project has been able to connect to specific individuals with an understanding of their interests and goals. The Land Stewardship Project has also begun to differentiate landholder needs in terms of types of landholder—for example, traditional farmers from more proactive farmers—and trialled ways to draw in traditional farmers.

Several next steps to strengthen this targeting include: organising Project data to understand progression of landholders through the Land Stewardship Project activities, using the categories of Lifestyler/Farmer and Novice/Experienced Land Managers as a starting point; using Scorecard items to pick up short-term change in land management practices, revisiting differences in landholders' level of skill in land management (entry, continuing and master land stewards) to find a way to differentiate learning needs and tailor learning activities to fit these. (Colliver and Wright 2013).

## 5 RECOMMENDATIONS

### 5.1 Opportunities for BCLN to fill gaps between training needs and currently offered

The BCLN proposed training framework was developed by reviewing what is currently offered by other providers and what needs are not currently being met. We looked at what BCLN is offering currently, and where there are opportunities to provide handouts, digital information, courses, workshops, discussion groups to complement these and meet the needs identified by landholders through the survey.

The Best Management Process Pathway (see Section 4.10, Figure 5) was developed along with the Stewardship Project. As discussed in section 4.10.1 above, in more recent years BCLN staff have found that it isn't easy to fit landholders into a particular category (Entry level, Continuing Practice or Master Land Steward), and that people may be at different stages with different farm practices. So while the suggested training framework in section 5.1.1 below is differentiated by these categories, we are using this as a planning tool to ensure that training is provided across the spectrum, from beginner through to advanced. Landholders are then able to pick and choose training that meets their needs at that time, for that topic.

The content of all training workshops are also developed based on research which examines the adoption of new practices by rural landholders (Pannell et al. 2006). This covers a range of issues including the sequence people go through when adopting new practices and the social, cultural and personal factors that influence people's decision making. It also examines how the relative advantage and 'trialability' of a practice affects its adoption and how this relates to extension work.

#### Managing pastures

Managing pastures was the most popular topic of future interest, and was identified as future works planned by 69% of respondents. However, BCLN currently has no training planned in this area, other than possibly through the farm discussion groups. This is the most obvious gap, and activities across the training spectrum (handouts, digital information, field days, training courses and through the farmer discussion groups) are of interest to BCLN members and other landholders. Staff suggestions included field days on pugging and pasture production, and a case study on the economic benefits of Landcare activities. These ideas may provide a good starting point. The 'Extended grazing trial producing healthy soil outcomes' with Graeme Hand, held in 2011 was very well received, perhaps something similar could be run again. Topics that FarmPlan21 participants wanted to know more about may also provide some ideas (see section 4.1.2), including nutritional values from various feed types, production efficiency and optimising beef production.

Two courses run by DEPI and one by the National Centre for Dairy Education have been included in the region wide training calendar. This will start to address the need, however the courses are not in the BCLN area and landholders are more likely to attend something run in their local area. Perhaps there may be options to work with these or other training providers to run events in the BCLN region, or to incorporate managing pastures into the upcoming soils training courses.

#### Weed control

Weed control was identified as a future work planned by 82% of respondents, and was the second most popular topic of interest. People were particularly interested in digital information, and also wanted handouts, field days and farmer discussion groups. There appears to be no digital information available on the BCLN website about weed control, so perhaps this is a good place to start. An easy to find link to all the weed resources would make it easier for landholders to access this information (as the information on the website is currently categorised under 'Resources' as either 'case studies' or 'fact sheets'). At the very least perhaps a link could be provided to the comprehensive South Gippsland weeds website (<http://www.southgippslandweeds.com.au/>). Weed control information could also be provided in hard copy.

Training planned for 2014 includes an Australian Chemical Users Permit course and a Blackberry rust field day. A wider range of field days and sessions at farmer discussion groups is likely to be of interest. Discussion group members could be surveyed as to which weeds they are dealing with and sessions planned around this.

### **Pest animal control**

Pest animal control was the third most frequently selected future work planned, and people were interested in both handouts and digital information on pest animal control. As with weeds, there is no information available on the BCLN website on pest animal control for rural landholders, just one fact sheet about urban rabbit control.

There are no training events planned for 2014 other than a pest plant and animal bus trip around Westernport, which is aimed at colleagues and funders rather than landholders.

### **Revegetation and bush management**

Sixty percent of respondents identified revegetation as a future work, and 42% wanted to know more about improving the health of their bushland, with digital and field day the most popular learning methods. The new 'Managing Projects and Vegetation on your farm' course will provide information on these topics, however marketing it as individual field days may suit people's needs better than as a course; as only six people wanted a training course in revegetation, and only 4 were interested in one on improving the health of my bushland. In addition, there are no resources available on the BCLN website on these topics, other than one link to a large Greening Australia publication (and it wasn't easy to find this document at the bottom of a page full of other information). Providing some short and relevant fact sheets may help meet people's needs.

### **Managing soils biologically**

BCLN and other providers have offered many courses and field days on managing soil biology over the last few years. It is clearly still a topic of interest to many people, and the three field days and two training courses scheduled for the next year will continue to deliver in this area. Sessions at the farm discussion groups are also likely to be of interest.

### **New topics**

The new topics of coping with extremes in climate (43%) and financial management/legalities/farm insurance (33%) were also of interest to many respondents, with digital and farm discussion group the most popular methods. There is one case study (Adapting to climate change) and one fact sheet (maximising water) available on the website, however more digital information would be good. Farm discussion group members discussed that perhaps some topics (e.g. finance) were better covered by the Victorian Farming Federation, however there may be opportunities to work together to provide sessions for the discussion groups. It may also be possible to identify a speaker and then ask them to present to all discussion groups, thereby saving time in researching information.

### **Managing soils conventionally**

Managing soils conventionally was also a popular topic. While this is not a topic that Landcare has traditionally covered, it may be worth considering in the context of engaging with traditional farmers. The 'Reaching the hard to reach' research found that traditional farmers often get new ideas from their fertiliser suppliers, so looking at this topic might be a good opportunity to work and develop relationships with such suppliers, and thereby a way to reach a new audience.

### **Topics no longer of interest – raising awareness and interest**

Some topics have clearly decreased in interest since 2010 (such as erosion and Agricultural Greenhouse gas abatement). While there may not be enough interest to run field days or training courses, these are still important environmental concerns, and perhaps Landcare could find other ways to keep some information flowing and perhaps to start a discussion or raise awareness on these issues.

## **5.2 Strategic approach to training**

One BCLN staff recommendation was to set up a calendar of training and field days that are linked in together, along with providing formalised notes for tours. This report along with the region wide training calendar and fact sheets (Appendix 1) provides a calendar at this point in time. If a method can be developed for incorporating future training opportunities that are offered into this calendar this will continue to provide landholders with this information into the future. Perhaps this could be done through the BCLN website in a format where information can be included as events are developed.

Continuing to update the calendar will also be useful for planning events, as it will ensure training is planned to fit into the bigger picture of the overall BCLN training framework.

Updating the region wide training framework on a regular basis (such as annually) will also ensure that BCLN continues to offer training that doesn't duplicate what other providers are offering across the region. To take this a step further, perhaps all training providers across the region could meet on a regular basis (e.g. annually) to discuss their upcoming training programs and to identify ways to work together and share resources.

In addition, wherever possible it would be good to continue the strategic approach used by The Land Stewardship project. This included assessing new landholders to ascertain their land management knowledge and skills and then directing them to relevant training opportunities, and working to ensure the timing of training programs fits with on-ground project cycles.

### **5.2.1 Suggestions for training framework for 2014 – Field days, farm discussion groups and Courses**

The following ideas could be incorporated into the BCLN training framework for 2014 and beyond.

#### **Entry level training**

Training offered to farmers at the 'Entry Level' stage in 2014 could include:

- Continuing to work with DEPI to present the 'FarmPlan21' whole farm planning course, there is one planned in Pakenham and if there is enough interest one could be run in the BCLN area
- Using the EBMP self-assessment process as a part of any field days run, to deepen participant engagement and provide an opportunity to consider how the topic applies to their properties
- Continuing to work with Chris Alenson to provide soil health courses. Two are planned for 2014/15. One possibility (depending on project requirements and timing etc.) is to offer one aimed at the beginner entry level and one at a more advanced level for those who have already done a soil health course. Including something on managing pastures into these courses is likely to appeal to members.
- Running something on managing pastures as this was a top priority for people. Staff ideas included a pugging field day and a pasture production field day, and see section 5.1 Managing Pastures for some further ideas.
- Running more weed and feral animal control field days and farm discussion group sessions
- Agricultural Chemical Users Course, for weed and pest animal control

#### **Continuing Practice training**

Training offered to farmers at the 'Continuing Practice' stage in 2014 could include:

- Providing sessions where landholders are able to review and update their whole farm plan, and to share lessons learned with other farmers in a small group setting. These were offered in 2009, and it may be time to run some again if there is interest.
- Managing Projects and Vegetation on your Farm course. This will be run as a series of field days, and will be open to all levels of experience.
- BCLN is currently applying for funding to run a new 'Water Management' course. This is envisaged to run over three field day sessions, including developing a water budget, a farm visit and planning to adapt participant's systems where required.

- Continuing to work with DEPI to provide iFarm (electronic whole farm plan) training courses. Landholders with an existing whole farm plan are able to do this to upgrade to an electronic version.
- Soil health field days: Compost trial at Darryl Hooks, Pasture Cropping at Simon Parkes, a third one in the Bass River catchment.
- A soil health training course with Chris Alenson (if one is run at a more advanced level)
- Weed control: blackberry rust field day
- The existing Dairy farm discussion group
- Starting a French Island Farm Discussion group, possibly with a focus on farm diversification

### **Master Land Steward training**

Training offered to farmers at the 'Master Land Steward' stage in 2014 could include:

- Managing Projects and Vegetation on your Farm course.
- Kongwak EliPak Beefcheque farm discussion group and Phillip Island Better Beef group sessions. This could include sessions on coping with extremes in climate and financial management/legalities/farm insurance.
- Whole farm planning review sessions

## APPENDICIES

### 5.3 Appendix 1: Region wide training calendar and fact sheets

See attached document

### 5.4 Appendix 2: Landholder survey questions

What works do you have planned for your property over the next few years?

Type of work	Please tick and provide more detail if you'd like
Managing pasture	
Managing soils conventionally	
Managing soils biologically	
General fencing	
Fencing dams	
Pest animal control	
Revegetation	
Weed control	
Improving health of bushland	
Erosion control	
Water planning	
Nutrient management	
Salinity works	
Track works	
Agricultural greenhouse gas abatement	
Effluent management	
Other – please specify what	

Is there something you would like to trial on your property?

**FUTURE INTEREST SURVEY**

Please tick the subjects you are interested in and the ways you would like to learn about them:

<b>Subject</b>	<b>Handouts</b>	<b>Digital info (e.g. CD or website)</b>	<b>Field day</b>	<b>Training course</b>	<b>Farm discussion group</b>	<b>Other (please describe)</b>
Managing pastures						
Managing soils conventionally						
Managing soils biologically						
Pest Animal Control						
Revegetation						
Weed control						
Improving the health of my bushland						
Erosion control						
Water Planning						
Nutrient management						
Salinity						
Agricultural Greenhouse gases						
Effluent Management						
Farm and machinery safety						
Coping with extremes in climate (e.g. drought, very wet years)						
Financial management/legalities/farm insurance etc.						
Looking after each other's emotional health in challenging times						
Other (what?)						

### Appendix 3: How Farmers Gather New ideas

	<p><b>Browsing</b></p> <p>Keeps in touch with what is happening, locally, but without a specific problem or opportunity</p>	<p><b>Researching</b></p> <p>A specific problem or opportunity becomes a trigger to search a wider range of sources, and to test what is found against on-farm experience</p>
<p><b>Pasture Management</b></p>	<p>For <i>practical experience</i>: self and family; watching neighbours; reading newspapers.</p> <p>For <i>technical information</i>: seed merchants and fertiliser distributors.</p>	<p>For <i>practical experience</i>: observing and talking with “good” local farmers; field days and expos to see practical examples; discussion groups to hear others’ ideas; local and farming press and industry publications to get stories.</p> <p>For <i>technical information</i>: seed merchants and fertiliser distributors for latest products; agronomists with suppliers and processors for practice options; local and farming press for new ideas; company catalogues, industry magazines for specific information; websites and agency staff (sometimes) for specific information.</p>
<p><b>Native Vegetation</b></p>	<p>For <i>practical experience</i>: observing local properties and stories in local newspapers.</p> <p>For <i>technical information</i>: newsletters from Landcare Networks and local Landcare group.</p>	<p>For <i>practical experience</i>: local farmers actively using native vegetation, typically local Landcare group members, and the local indigenous nursery.</p> <p>For <i>technical information</i>: staff and publications of Landcare Networks, along with Melbourne Water staff of on-ground projects,</p>

#### Suppliers named by landholders as sources of new ideas

##### **Pasture management**

The Weekly Times

Gippsland Farmer

Local papers

DPI agriculture notes

Landline TV program

Newsletter from Holmes Sackett (agricultural consultancy from Wagga Wagga NSW) – “bit out there in terms of ideas”

Dairy Australia magazine

The Australian Dairy Farmer magazine

Dairy Australia field days (Gillian Hayman, Dairying for Tomorrow) on fertiliser or effluent

Peter Notman, Notman Pasture Seeds, have pamphlets/flyers/field days

Farm Depot, Warragul

Gippsland Bulk Spreaders

Korumburra Lime & Spreading (Hifert)

Landmark

Elders – have flyers

Murray Goulburn – agronomist Chris Scott & field officers

Firm in Warragul that had a focus farm group run by Jeff Urie (farmer couldn't remember name)

Peter Kemp (contractor)

DPI Ellinbank – Frank Mickan in particular

MLA – field days

Roybulls (Stock & Station agents – Leongatha), monthly newsletter – *couldn't find this name, maybe Rodwells & Co.*

Beefcheque

Angus society

Dairy expo – Poowong

Field days – Lardner

Field days – Henty (Northern Vic)

Field days – Elmore

Alternative farming expo - Seymour

### **Native vegetation**

Melbourne Water

Bass Coast Shire

South Gippsland Landcare Network

Westernport Water

Envirofund

DPI weeds project officers

DSE (Ecotender)

Landcare notes

Landcare group meetings

Ian Starkey – Strzelecki Plant Farm

Blue Gum Nursery

Nursery in Korumburra (not sure which one)

Kooroman Nursery

## 6 REFERENCES

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