The Australian Master TreeGrower Program (MTG) is more than just a short course in farm forestry. It is a comprehensive package focused on ensuring that the development of farm forestry is driven by the aspirations and opportunities of Australian farmers. The program encourages farmers to truly aspire to be "master tree growers" in their own right, who can design and manage unique multipurpose forestry options that suit their own circumstances and interests.

In addition to providing regional education courses the program supports farm forestry newsletters, publications, web sites, community groups, marketing cooperatives, field days, seminars, and "big events" like Agroforestry Expo '99 and the International Farm Forestry Extension Conference 2001. It is through these activities and the media that Master TreeGrowers provide encouragement and support to other farmers thus extending the influence of the program.

Although the MTG Program is the initiative of the Department of Forestry at The University of Melbourne it is the participation and support of the farmers and the many advisers, researchers, government agencies and industry groups across Australia that makes it work. For our part, the Forestry Department is grateful for the financial support provided by the Myer Foundation and the Australian Government's Joint Venture Agroforestry Program, The Natural Heritage Trust and the Commonwealth's Farm Forestry Program (AFFA).
The aim of the MTG is not just to increase the area of farmland under plantation and we certainly do not promote particular species, products or planting systems. The aim is to increase landowner participation in the design, management and evaluation of appropriate agroforestry and farm forestry systems. If forestry does offer farmers real opportunities we would expect increased tree growing on farms and more active management of private native forests. After more than five years and thirty-five regional programs the impact of the Australian Master TreeGrower Program on farm forestry in Australia is now clearly evident. Participants talk of increased confidence about their own farm forestry activities and greater awareness of opportunities resulting from the knowledge, networks and experience provided by the program. Many farmers can also be seen taking a more active role in farm forestry development at a regional, state and national level as part of landowner groups, regional and state planning committees and private organizations.

The impact is also evident amongst the many farm forestry advisers, government officers, industry players, and farmers who have been exposed to the program or its participants. Across Australia farm forestry research and development programs run by government and industry are adopting a more participatory approach as a result of the success of programs like the MTG and the growth of regional agroforestry networks that stress the importance of farmer involvement in the design and management of multipurpose forests on their land.

The significance of the title "Master" is in the acknowledgment of the knowledge and experience that the participants bring to the group and the potential they have to influence others within their region. By working with regional groups, rather than individuals, the program stresses the importance of networking and peer support while avoiding the risk of anointing "gurus".

What’s involved in a MTG Program?

From experience gained from more than 35 successful MTG programs, a comprehensive and continuous evaluation led by a team of anthropologists, and a series of regional and national workshops and meeting, involving participants and partners we believe we have a practical and valid
framework for the design and delivery of the program. While ensuring there is consistency in the intent and content of programs across Australia the framework allows sufficient flexibility to incorporate local circumstances and the individual aspirations and needs of regional participants and supporters.

In practice, the MTG program is a short regionally based educational program (approximately 42 hours), in agroforestry and farm forestry design and management for leading farmers with the aim of:

1. Facilitating landowner involvement in the development of agroforestry and farm forestry within their regions by providing education, experience and support to selected tree growers and their advisers.

2. Helping landowners recognise the interests of governments, industry and community groups in their revegetation and forest management activities and encouraging mutually beneficial partnerships.

3. Providing landowners with simple and practical approaches for the preparation of farm forestry plans and their evaluation of forestry projects.

4. Encouraging landowners to play a more active role in the management of regional grower groups and programs.

5. Establishing a regional and national peer group of ‘Master TreeGrowers’ that provides support for farmers involved in farm forestry and contributes to regional extension and development programs.

6. Supporting regional farm forestry, agroforestry and Landcare projects by providing an education program that can be tailored to their requirements.

7. Encouraging open, strong and sympathetic communication about farm forestry between farmers, advisors, regulators, researchers and industry.

The regional partners

Each MTG program is presented as a partnership between the Department of Forestry and one or a number of regional groups or organisations. The regional groups maybe landowner groups or networks, government agencies, non-government organisations, such as Greening Australia, or industry bodies. Once involved, the participants become a partner in the program as do the presenters and local sponsors. Each partner has a particular role and responsibility:

ROLE OF THE DEPARTMENT OF FORESTRY

Rowan Reid and Peter Stephen of the Department of Forestry at the University of Melbourne nationally coordinate the MTG Program. Our role is to oversee the development and delivery of all regional programs to ensure quality of content and consistency in approach.

To help initiate and conduct programs the Department of Forestry:

- Provides introductory information to potential regional coordinators, sponsors and participants
- Contributes to regional planning meetings with key stakeholders to help explain the program and seek support
- Undertakes an evaluation including questionnaires for participants at the beginning and the end of the program
Attends and presents sessions where required and appropriate (commonly we attend the introduction, measurement, silviculture, evaluation and closing sessions)

During each program the Department of Forestry will supply each participant with the following:

- A copy of *The Farmer's Forest* - the manual of the MTG
- A copy of *Design principles for farm forestry: A guide to assist farmers to decide where to place trees and farm plantations on farms* published by the Joint Venture Agroforestry Program
- A MTG Tape and other equipment
- A Master TreeGrower hat

At the end of each regional MTG Program the Department of Forestry will supply each successful participant with:

- A certificate acknowledging their participation (Note that this is not a formal university qualification)
- A Master TreeGrower farm gate sign

Follow up support includes:

- The development and maintenance of a web site (www.mtg.unimelb.edu.au)
- An occasional newsletter
- Opportunities to participate in regional, state and national farm forestry events

The contribution from industry, government staff and community groups has been tremendous.

Richard Finley-Jones the regional facilitator for an MTG program in northern NSW with a Master TreeGrower.
An ongoing free telephone and electronic advice service
MTG refresher courses in association with regional groups.

ROLE OF THE REGIONAL PARTNERS AND COORDINATOR
It is essential that each region nominates and supports an appropriate regional coordinator. Coordinators have included leading landowners, government or NGO staff, and employees of regional forest industry programs.

It is critical that the coordinators have the confidence of the farm foresters and other stakeholders within the region. The regional coordinator needs to:
- Liaise with the Department of Forestry before and during the program
- Involve participants, regional sponsors and industry in the design of the program
- Oversee the selection of appropriate presenters and participants
- Take responsibility for the day-to-day running of the program

ROLE OF THE PRESENTERS
The program puts great emphasis on involving local "experts" or "specialists" so as to reinforce links between participants and those within the region who can provide ongoing support. Presenters are expected to provide a clear synopsis of the important principles or points they wish to convey and then facilitate discussion within the group about the implications for them as farm foresters. Presentations should be complemented with written notes or supporting documents where possible. Feedback from previous programs suggests that presenters should be made aware of their audience's experiences, interests and likely requirements and encouraged to base their presentation around this.

Because the program has so much to offer those who are currently working locally within government, industry or as private consultants, we have found that most presenters are happy to provide their services freely and welcome further contact with participants. Having said this we strongly support the payment of a fee to non-participating landowners whose properties are visited during the program or others who would not necessarily gain from the program.

The presenters are encouraged to join farmers in the paddock and discuss practical options and approaches to multipurpose design: Gary Waugh (CSIRO, Timber processing) and Andrew Bennett (Latrobe University, Wildlife) talk with farmers.

THE LOCATION
Master TreeGrower programs are conducted within regional communities rather than from educational institutions. Participants are drawn from within a geographical catchment based on climate, social networks, farming systems, markets and farm forestry opportunities. Presentations are
commonly held at a range of venues including community halls, government officers and private venues across the region so as to allow easy access to farms, forests and businesses for field tours.

Rarely are two programs ever held in the same location although overlapping programs may use the same venues or visit the same sites. It is important that the region, and the participants, take ownership of the program by using the facilities within their communities.

WHO PARTICIPATES?
The program aims to support those individuals, particularly farmers, who have shown that they are worthy of participation in a Master TreeGrower Program because of their demonstrated practical commitment to farm forestry, their desire to learn and their likely influence on others within their region. Many farmers have made a substantial commitment to the development of agroforestry or farm forestry projects on their properties. Many have developed their interests alone while others have received direct assistance to establish “demonstrations” or land protection projects involving farm forestry.

It important that these growers succeed they have an important influence on the perceptions and experience of their neighbours and friends. These growers are the key targets of the Master TreeGrower Program.

The selection of participants is by nomination. Outstanding growers, industry members and experienced extension agents are asked to suggest individuals who they believe to have the potential to play an important role in the development of farm forestry within their region. Although people are welcome to nominate themselves we prefer not to advertise widely for candidates as this may lead to disappointment amongst those who miss out. The participants should be keen to share of their own experience and knowledge and be willing to work with others in identifying and defining farm forestry opportunities in their region.

Twenty is considered a manageable number of participants to ensure effective group dynamics and program viability. Partners and other family members of landowners participating in the program should be encouraged to attend as they wish.

COST TO PARTICIPANTS
Participants are asked to pay a registration fee of about $100 (partners can attend without paying a registration fee although they would not receive certificates, signs or equipment). The actual fee needs to be set by the regional organising bodies at an amount they feel is acceptable, although the Department of Forestry must approve the final figure. This money stays with the regional organising body to pay for facilities, morning and afternoon teas, transport, copying and other course related expenses.

An additional fee to cover costs such as morning and afternoon teas, lunches, accommodation and buses may be required. Everyone who attends the sessions, including the organisers and any family members, should share this cost equally. Coordinators should negotiate options with participants to avoid unnecessary or unexpected costs. Participants may, for example, prefer to use their own vehicles rather than hire a bus, or pack their own lunches to save on costs.

Master TreeGrowers willingly contribute their experience, enthusiasm and their time to the program.
MINIMUM STANDARDS FOR PARTICIPANTS TO COMPLETE THE PROGRAM

Minimum standards are set to ensure that every "graduate" has earned their certificate. These are as follows:

- Participants should make every effort to attend all sessions
- Every participant should complete a project or presentation
- Participants should be willing to share their experience and ideas with the group and treat other participants with respect

The final decision on whether a participant is awarded a certificate and gate sign is up to the regional coordinator. The coordinator should consider the participant's experience and commitment to the program and to farm forestry in the region. If a participant misses too many sessions for legitimate reasons, they should be encouraged to "make up" the lost sessions by organising an event such as a field day on their property (if not already visited) or preparing a report or service for the other participants. A clear indication of the program requirements should be set out for participants at the first session.

The Master TreeGrower Course Framework

In a short course it is impossible to cover all the technical aspects of tree growing and private forestry. The program simply provides participants with guiding principles and some of management tools to help them develop and evaluate appropriate agroforestry and farm forestry designs. Encouraging the development of a peer group of active growers with strong links with regional specialists and industry is a critical outcome.

The MTG Program is not an alternative to traditional field days or skills based training courses. Neither should it be seen as an introduction to farm forestry for novice growers.

The Department of Forestry has developed a framework for regional programs to follow. This is to ensure consistency and uniformity throughout Australia, while at the same time allowing individual regions adapt the content to suit their own requirements. How regions "fill-in" the basic framework is flexible and will depend on regional land management constraints and the participants' requirements and interests.

The MTG Program is principally a design program. Landholders are encouraged to review their land management constraints and aspirations (be they physical, economic or social) and consider the opportunities for designing farm forestry systems that meet these goals. By the end of the program participants are expected to be able to critically design and evaluate unique multipurpose farm forestry systems that meet land management objectives and constraints while having the potential to produce a commercial product.

It is assumed that the emphasis of most regional programs will be on the potential for the production of commercial products and services from the revegetation of farmland. In some areas there will be greater emphasis on native forest silviculture or non-timber products and the framework can be adjusted to suit these requirements.

The location, timing and balance between field and seminar work during the program is very flexible. Although the basic framework sets out 8 one-day sessions totalling around 42 hours, regions may wish to adapt this structure to suit their own circumstances (such as a mix of evening seminars and day trips).
It is imperative that the emphasis on participatory learning is not threatened and that the program is delivered over a period of at least a month, preferably two, to allow time for participants to build relationships.

**PRELIMINARY SESSION**

One to two months before the program is expected to run, Rowan Reid or Peter Stephen can meet with the regional coordinator, sponsoring groups and leading regional farm foresters to explain the MTG Program and discuss the proposed structure.

We feel this is important so that all groups understand one another and clear objectives for the program are set early. It may be useful to combine this meeting with a public seminar or field day during which possible participants can be introduced to the program, contribute their ideas and encouraged to consider their involvement.

**Session 1: Introduction to Agroforestry and Farm Forestry Design (6 hrs)**

**Content**
- Introduction to the MTG Program and the Diagnosis and Design approach to project planning
- Sharing of participants' experience, interests and aspirations and the identification of common motivations that can be incorporated into the later sessions
- Site inspection of leading farm forestry properties with emphasis on the design approach and as an illustration of how participants might present their own experiences (see presentation)

**Learning Outcomes**
- An appreciation of the potential to design unique farm forestry systems to match individual circumstances and an understanding of the Diagnosis and Design approach
- An appreciation of the need to understand the realities of the tree-product markets and the marketing process
- An understanding of the need for compromises in agroforestry/farm forestry designs to attain multiple benefits and attract commercial interest
- An increased awareness of the range of experiences and interests amongst the group

**School of Forestry Contribution**

Rowan or Peter will attend the first session in order to hand out introductory material including books and hats. Both are available to make presentations on The Master TreeGrower Program and Farm Forestry Diagnosis and Design and facilitate a workshop on farmer interests in farm forestry.

**Session 2. Market opportunities for farm forestry products & services (6 hrs)**

**Content**
- Visits to mills and market outlets to discuss products specifications, processing methods, market trends, pricing and marketing issues. Emphasis is on product specifications (eg "target log"), prices and market access
- Hear an industry perspective on marketing and pricing of farm forestry products and services
- Review existing and potential harvesting and transporting methods and costs
Learning Outcomes
- Identification of product and service specifications and requirements from the point of view of existing processors and markets
- Establishment of communication links between growers, industry and markets
- An appreciation of the relationship between product specifications and price
- An understanding of the marketing chain from purchaser to end user
- An understanding of local processing techniques and likely developments in the industry
- An understanding of some of the costs involved in harvesting and marketing tree products and services

Session 3. Tree and Stand Measurement (6 hrs)

Content
- Demonstration and discussion of tree and stand measurement techniques
- Measuring exercise to be completed by participants
- Introduction to the principles of silviculture

Learning Outcomes
- An appreciation of the need to measure trees and forests
- Skills training in the use of simple tree and stand measurement equipment (the MTG Tape)
- An understanding and use of simple forestry calculations
- An introduction to the relationship between tree measurements and silviculture
- Completion of a farm forestry measurement exercise (i.e. calculation of tree height, DBH, stand volume, basal area and MAI)

School of Forestry Contribution
Rowan and Peter are available to conduct the measurement exercise including an introduction to the principles of farm silviculture. Tapes, measurement exercise and computer spreadsheets will be provided.

Session 4. Silviculture Principles- Growing the target forest (6 hrs)

Content
- Review or completion of presentation on the silvicultural principles (depending on what was covered in Session 3)
- Discussion of the various silvicultural practices adopted by established forest growers in the region
- Visits to industrial and farm forestry sites and hearing managers justify their silvicultural regimes

Learning Outcomes
- An understanding the link between silvicultural management, costs, risks and product quantity and quality
- An appreciation of the reasons for the silvicultural regimes adopted by industrial and government forest owners in the region
- An understanding of the silvicultural management options available to growers to meet target log specifications
Sessions 5, 6 and 7. Agroforestry & Farm Forestry designs for local conditions (6 hrs each)

Content
- During these three sessions, it is anticipated that field tours will largely involve inspections of participant’s own properties and their presentations.
- For each property (or perhaps each morning/afternoon), it is anticipated that there would be a "theme" (such as salinity and farm forestry, wildlife, taxation etc) and that ‘experts/specialists’ would be invited along to facilitate, contribute and encourage discussion on issues related to that theme.
- Appropriate “experts” would be given the opportunity to make short presentations on the principles of design related to their expertise before going onto sites and participating in real life problem solving discussions
- Farm forestry economic evaluation, policy and regulation

Learning Outcomes
- An appreciation of the diversity in farm forestry design options and issues in multipurpose design
- Further development of relevant ‘themes’ that will benefit participants (related to issues highlighted in the first session)
- Experience in conducting a farm tour or presentation
- An understanding of the compromises or balances necessary to achieve an appropriate design that meets a farmer’s expectations within their management constraints

School of Forestry Contribution
Peter and Rowan are available to present an MTG Economic exercise that incorporates the evaluation of farm forestry projects using discounted cash flow analysis. This exercise would be ideally set on one of the participant’s properties and incorporate an analysis of an existing or proposed project.

Sessions 8. Closing Session

Content
- Completion of the presentation of projects by participants (on or off farm)
- An interesting concluding event or presentation: (eg, prominent speaker, debate or visit)
- Debate and discussion on the value of the program and completion of the evaluation forms
- Presentation of Master TreeGrower certificates and gate signs

Farmers celebrate the completion of their programs. The future of farm forestry is in their hands.
Learning Outcomes

- Strengthening of the relationships and empathy among the participants and a celebration of the shared experiences

School of Forestry Contribution

Rowan and Peter would be keen to attend the final sessions to congratulate participants, the coordinators and their supporters. We will provide the certificates of completion, gate signs and outline how we see the ongoing role of Master TreeGrowers in the extension of farm forestry in their region.

Although the regional coordinator will be responsible for finalising the program and organising events the program should be discussed with Rowan Reid or Peter Stephen prior to being presented. The Department of Forestry reserve the decision as to whether or not the program qualifies as a MTG Program.

Participant’s Project

All participants are required to prepare and present a farm forestry project during the program. Farmers are encouraged to base their project on one of their own farm forestry projects (even if the trees are yet to be planted, and to follow the Diagnosis and Design approach. This approach begins by describing the primary reasons for undertaking farm forestry, outlining the economic, social and environmental design constraints, and defining what they consider to be the important criteria for success. Farmers would then outline what they have done, or plan to do, highlighting lessons learnt and expectations for future management.

Those participants without land might undertake a similar project on someone else’s farm or make a special presentation on a topic of interest to the group. As an example, a carpenter doing the program in Ballarat provided an excellent presentation on grade stressing of timber and what this means to a grower. Participants are asked to present their findings to the group, preferably by oral presentation accompanied by written notes or completed design pro forma (see end of chapter). Most of the presentations should be done on-site when the group visits the properties of participants.
Where this is not possible presentations might be made at any appropriate time during the program. This book includes a project design case study that could be used as a guide for farmers. The notes may be prepared as "farm tour notes" and used in the future by the farmer if they conduct further tours.

**MTG Exercises**

In addition to the project presentation, the participants are also expected to complete two exercises during the program. The first is the Tree and Stand Measurement Exercise involving the use of the MTG Tape, which is usually completed in Session 3. The second, done later in the program, is the Economic Evaluation Exercise.

Along with the design project these represent the core skills based learning elements of the Australian Master TreeGrower Program and are common to all programs delivered across Australia. Rowan and Peter are available to present and coordinate these components of the course although local presenters can be used if considered appropriate.

**Safety and insurance**

Safety throughout the program is an important issue that needs to be considered by all participants, presenters and coordinators, particularly during field trips to industrial sites, isolated farms and commercial forests.

Insurance (Public Liability, Accident and possibly Professional Indemnity) is the responsibility of the coordinating group(s).

Each coordinator must be sure that they, their organisation, and the participants have appropriate insurance cover. Participants who host farm visits must have public liability insurance and are advised to contact their insurance company and inform them they are conducting a farm forestry related tour. It should not be assumed that the involvement of the University of Melbourne provides cover for the program or participants.

The Department of Forestry requires that:

1. All those participants with current first aid certificates to level 1 be identified during Session One and made known to the whole group.
2. All relevant emergency contacts be listed and distributed to the group during Session One. This should include all emergency agencies and the closest hospital location.
3. A clear map be provided of each location visited.
4. An itinerary for each session (trip) to be left with an appropriate person within the coordinating group(s) home office.
5. The responsible person (owner or manager) or authority (public land) must be notified if field tours include inspections or activities on private land or in public forests.
6. All members of the group must wear appropriate clothing and footwear, and respect all appropriate safety procedures (such as hard hats, smoking bans, vests etc), when visiting industrial sites (mills, harvesting operations etc) and public forests.

7. A mobile phone to be available at all locations for emergency situations.

8. A well equipped first aid kit to be available at all sessions and everyone to be made aware of its location.

9. All identifiable hazards should be assessed for all activities and appropriate action taken to eliminate or reduce the potential risk. All identifiable hazards for each session should be communicated to all participants.

Additional resources

The School of Forestry has developed or has access to a wide range of supporting material for coordinators and participants:

- The Australian Master TreeGrower Web Site can be accessed via http://www.mtg.unimelb.edu.au
- A video library containing practical and topical farm forestry videos
- An extensive library on all agroforestry and farm forestry topics
- A comprehensive database of research and extension material and contacts