



# Northern United Forestry Group

## Minutes of Monthly meeting, Raywood GC, 8 pm Wednesday 22 February 2006

### 1 Welcome and apologies

The meeting commenced at 8:15 pm. Ian Rankin welcomed guest Anna Ridley, DPI Rutherglen, and CRC for Plant-based Management of Dryland Salinity.

**Present:** Ian Rankin, Mal Brown, Tim Johns, John Toll, Andy Hay, Stuart Ayson, Darren Bain, Darren Kerr, Phil Dyson, Ken Wellard, Louise Wellard, Rob Comer, Lindsay Cail, Paul Turnbull, Mal Johnson, Anna Ridley.

**Apologies:** Howard Perry, Trevor Barker, James Williams, Lynda Cartwright, Shaun Quayle, Marg Dack.

### 2 Minutes of previous meeting held 25 January 2006

**Motion:** "That the minutes of the meeting held Raywood Golf Club, 25 January 2006, be accepted as a true and accurate record of what took place at the meeting." Moved Lindsay Cail. Seconded Stuart Ayson. Carried.

### 3 Business arising

#### Farm Forestry familiarisation tour

Participants reported on the successful Farm Forestry familiarisation tour (Part 2) to Deniliquin on 3 February 2006. Stuart Sizer, a contractor in the Deniliquin area, showed participants a number of managed plantations in the area, including seed orchards. One impressive seed orchard involved a stand of 10-year old *Eucalyptus dunnii* that produced in one year an average of 200g of seed per tree. One individual tree produced 500g of seed. The seed was sold to the CSIRO for \$30 000 per kilogram. Yes, that's right, \$30 000 per kilogram. Thanks to Shaun Quayle and Trevor Barker for their driving.

#### New Member Kit

Ian Rankin added 'Plantation Development Notices' for inclusion in the possible contents of an NUGF New Member's Kit. Paul Turnbull agreed to work with Ian and Shaun Quayle to further develop the kit.

### 4 Correspondence in

- Email from Geoff Park, NCCMA, requesting that NUGF put forward names to attend a 5-day native vegetation conference in Albury in March 2006. John Toll will represent NUGF at the conference.
- Request from BRS and ABARE to interview NUGF representatives regarding the Kamarooka Project as part of a national mid-term NLP review. The meeting took place Thursday 16 February and involved Ian Rankin, Mal Brown and James Williams.
- Feed test results for the Kamarooka Project.

Test	Method	Sample 01-A (grasslands) Received 27 Jan 2006	Sample 02-A (pasture among trees) Received 27 Jan 2006
Moisture	Wet	48.1%	41.3%
Dry Matter	Wet	51.9%	58.7%
Crude Protein (N x 6.25)	NIR	9.3% of dry matter	7.6% of dry matter
Natural Detergent Fibre	NIR	65.7% of dry matter	64.4% of dry matter
Digestibility (DMD)	NIR	49.9% of dry matter	47.1% of dry matter
Digestibility (DMOD)	Calculated	49.1% of dry matter	46.7% of dry matter
Metabolisable Energy	Calculated	7.0 MJ/kg DM	6.5 MJ/kg DM

ME = (0.203 x DOMD%) – 3.001

### 5 Correspondence out

- Minutes of January meeting

- Card to Stuart and Megan Ayson on the occasion of their wedding. Congratulations!
- Request to Dr Sharman Stone re 7 April Field Day.

**Motion:** "That the correspondence be accepted." Moved Andy Hay. Seconded Andrew Wall. Carried.

## 6 Reports

### **President's report**

Ian Rankin reported on the successful Farm Forestry Familiarisation Tour (3 February) and the interview with representatives from BRS and ABARE as part of the mid-term NLP review (16 February).

### **Treasurer's Report**

Rob Comer submitted a detailed report for the last month of activity.

**Motion:** "That the Treasurer's report be accepted and that accounts received be approved for payment." Moved Rob Comer. Seconded John Toll. Carried.

### **Phil Dyson - Kamarooka Project Update and NUG website**

Phil Dyson tabled a detailed report of his activities relating to the hydrogeology at Kamarooka and explained the latest hydrographs incorporating data downloaded from the data loggers since the last meeting. Phil also reported on tasks completed for the new NUG website. See attachment 1.

### **Tim Johns - Hand Held Pruning Equipment, Farm Forestry and Apiary**

Tim raised the issue of apiary as an additional income stream for farm foresters. Discussion centred on the difficulties of the 2005-06 season for apiarists and the heavy flowering being observed on grey box this year – part of a long-term cycle well known to apiarists.

### **Ken Wellard - Nursery matters**

Ken handed around samples of seedling propagation trays and explained the difference between the 40-cell (5x8, 93 cubic cm) Hyko tray and 63-cell (7 x 9, 97 cubic cm) Growers Needs tray.

Ken presented a discussion paper on NUG and Seed Orchards. This concept was well received and will be an agenda item for the next meeting. See attachment 2.

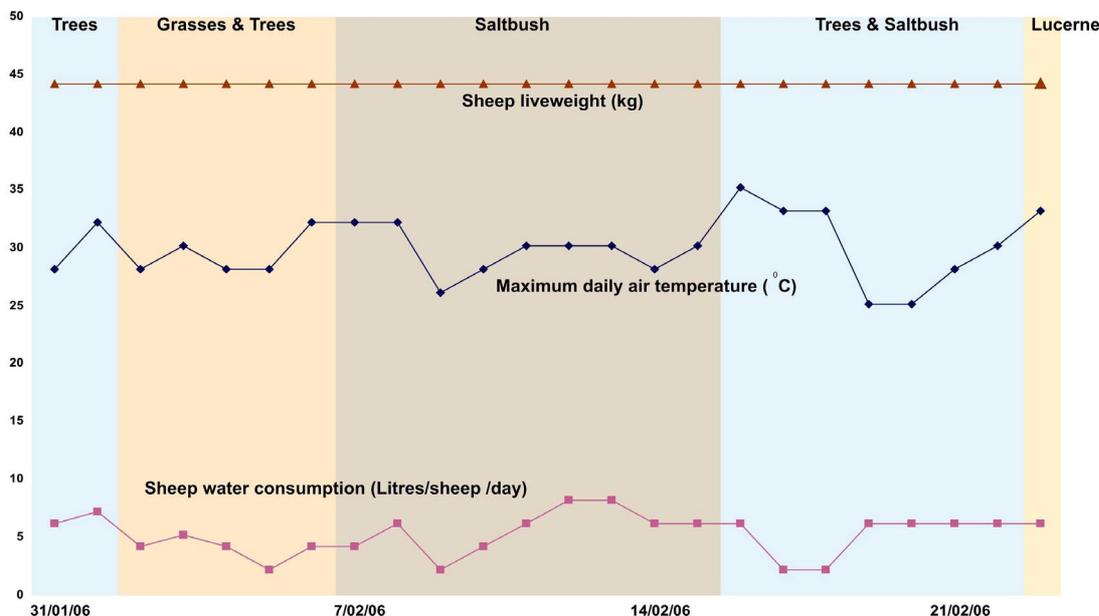
### **Marg Dack – NUG's Melbourne correspondent**

Marg reported on a local (Melbourne) wood yard operator who is looking for a constant supply of firewood at 20% moisture. The wood is selling at \$90 per cubic metre split.

Marg asked (via Ian Rankin) whether any members were interested in forming a 'Firewood Cooperative' and supplying the Melbourne market through a retail outlet. This issue will be an agenda item for the next meeting.

### **Andy Hay – Saltbush and the Kamarooka Project**

Andy presented data and anecdotal evidence of the sheep's behaviour during the current trial. The data is summarised in the following graph. 100 lambs went into the site weighing 44 kgs and came out after 3 weeks weighing 44 kgs. This complemented the Hay's farming system by allowing a lucerne paddock to put on another three weeks growth during a very dry summer. The Hay's aim to finish the lambs off for sale in May.



## **7 General Business**

### **7.1 Anna Ridley, CRC for Plant-based Management of Dryland Salinity**

Anna outlined the composition and role of the CRC for Plant-based Management of Dryland Salinity and reported on her visit to Kamarooka earlier that afternoon with Phil Dyson and Geoff Park, NCCMA.

The CRC is in its fifth year of a seven-year program.

Key programs include:

- Sustainable Grazing on Saline Land
- Long-term breeding of herbaceous perennials
- Oil Mallee Systems
- Economics and Policy

Currently work is being done on the asset-based approach to setting priorities for funding NRM works. Of interest to NUFG is the fact that the Bet Bet catchment exports an annual salt load of 7000 tonnes and so does the Kamarooka catchment. No priority works are occurring in the Kamarooka catchment.

John Toll offered his property to the CRC for work on saltbush plants indigenous to his area.

### **7.2 Kamarooka Field Day Friday 7 April**

A sub-committee was formed to develop the program and look after logistics for the day. The committee comprises Lindsay Cail, Phil Dyson, Ian Rankin, Andy Hay and James Williams.

### **7.3 GST**

Phil Dyson asked if Rob Comer for an update on NUFG's registration for GST. Rob to advise next meeting.

### **7.4 Annual Landcare BBQ**

Andrew Wall reported that the North Central, Bendigo Creek and Kamarooka Landcare Groups are holding a combined BBQ at the Kamarooka recreation reserve commencing 6 pm Friday 3 March. Drinks at bar prices. All families invited. Guest speaker is Elvyne Hogan, Trust for Nature. Please phone Penny Wall on 5436 1262 to register your attendance, for catering purposes.

## **8 Meeting closed at 10:15pm.**

## **9 Next Meeting**

Raywood Golf Club, 8pm Wednesday, 22<sup>nd</sup> March 2006.

# Monthly report to the NUFG Cabinet

Phil Dyson  
Minister for Hydrogeology and NUFG Website  
Associate Minister for the Public Benefits of Private Forestry

## Hydrogeological matters

- The watertable survey for February 2006 was completed on Sunday 19 February (see attached results).
- Eight new bore data loggers have been ordered through the Melbourne based company 'Hydroterra' and are expected to arrive in the country this week.
- A digital rain gauge has been ordered from Hydroterra and is also expected to arrive this week.
- Permission has been sought and granted from DPI to install three loggers in existing DPI bores in the Kamarooka catchment.
- DPI contracted to complete a geophysical survey of the supplementary site. Fieldwork was completed in mid January.
- DPI has been contracted to establish groundwater wells in the supplementary site. Drill sites have been registered with Goulburn-Murray Water and fieldwork is to be completed in the next two to three weeks.
- Annual service on bore data loggers completed and loggers re-installed

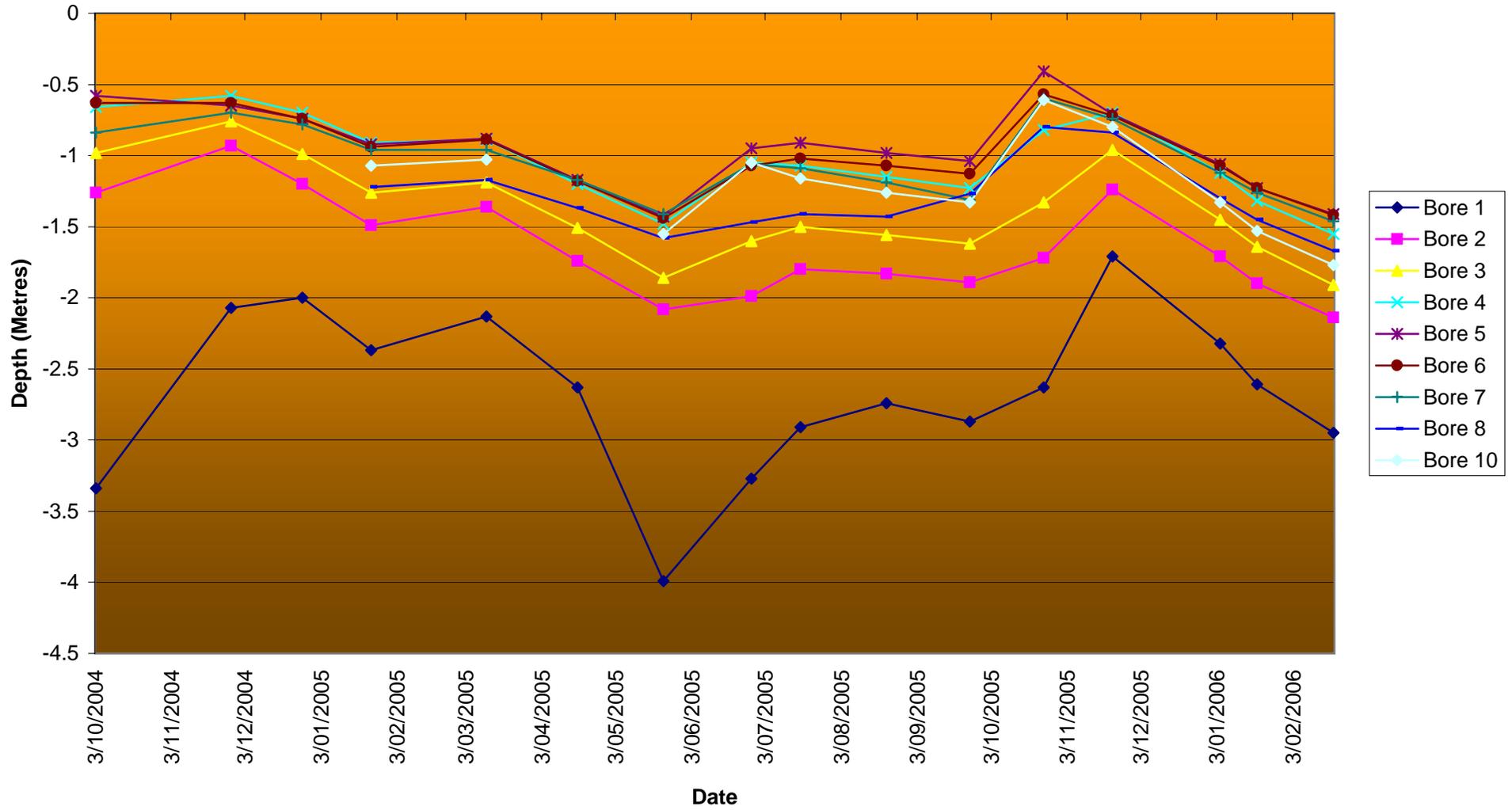
## NUFG Website

- The new site is now fully operational and has been registered with Google
- The vegetation survey upload has been completed
- The NUFG poster illustrating production from saline land at Kamarooka has been uploaded
- The groundwater monitoring data sheet comprising all records has been updated and uploaded
- Graphs of groundwater trends across the Kamarooka site have been updated and uploaded
- First member website (draft) developed in Word and uploaded.
- Still more work to do on the site but it is now functional
- Minutes of January meeting loaded to a new 'minute' page

## Public benefits of private forestry

- Meeting with Kevin Goss CEO of Cooperative Research Centre for Plant Based Salinity Management.

Kamarooka Watertable (Manual Measurement)



# NUFG and SEED ORCHARDS

Ken Wellard Neangar Nursery

## 1 What is a Seed Orchard?

A plantation of superior trees that produces superior seed. This seed produces trees that have desired (improved) characteristics, such as shape, form, tolerance to specific environments or growth rates. There are many methods for genetically improving trees; however, to simplify things, we can assume there are three sorts of Seed Orchard.

**Seed Production Area (SPA):** Is a thinned plantation of desired provenance from which seed is collected. Is a basic tree improvement strategy, however, in some species, it can produce large gains over inferior provenances.

**Selected Seed Orchard (SSO):** Usually involves large progeny trials of known superior mother trees. Data is collected, plantation is thinned, trees flower and superior seed is collected. The *Eucalyptus dunnii* seed orchard at Deniliquin is an example of this.

**Clonal Seed Orchard (CSO):** Involves cuttings (clones) of superior trees grafted onto rootstock and then breeding to produce brilliant seed that produces brilliant seed.

## 2 ADVANTAGES TO NUGF:

- Improved genetic stock for planting
  - Better Shape and form
  - Higher MAI
  - Could breed other attributes such as Salt tolerance
  - Seed could be sold at a premium price.
- Kudos for R+D
- Higher MAI will be more attractive to investors
- Better form may reduce establishment costs.
- Restricted access to improved seed might entice new members.

## 3 HOW COULD NUGF DO THIS?

3.1 – Select the desired characteristics we require for improvement. These might vary from species to species. E.g. *Acacia stenophylla* could be selected for improved growth rates, whilst *Acacia salicina* could be selected for shape and form improvement.

3.2 – Research NUGF member's plantations and assess species and provenances for desired characteristics. It is assumed members are aware of the genetic background of the species in their plantations!!!!

3.3 – Select plantations that meet criteria. Record performances of provenances in plantations, so as to avoid crappy provenance selection in future.

3.4 – Thin plantations if necessary.

3.5 – Collect seed following year. Use this moderately improved seed in all NUGF plantations in the short-term.

Any Seed Orchard of greater complexity than this would probably involve outside help in completing tasks such as, selecting genetic stock, plantation design etc.

## PROPOSAL:

Gauge NUGF member interest in creating NUGF seed orchards. If sufficient interest, present options to NUGF:

- Possible species to improve.
- Desired characteristics in selected species.
- Short-term and long-term tree improvement strategies for selected species.
- Potential benefits/drawbacks.
- Funding and information sources.

## References:

ALRTIG (2001). Compendium of Hardwood Breeding Strategies. RIRDC Publication 01/100.  
ALRTIG (2002). Breeding trees for the low rainfall regions of southern Australia. RIRDC publication 02/031.  
ALRTIG (2005). Update of hardwood breeding strategies. RIRDC publication 05/023  
P.R. Bird (2000). Farm Forestry in Southern Australia. Dept of Natural Resources and Energy, Victoria.