Minutes of the CFGRP Advisory Council Meeting May 10, 2000

Announcements

1. CFGRP currently has one MS student, Ryan Atwood, who should finish at the end of the fall semester. Two new students will be arriving this fall, one Ph.D. student and a MS student. We anticipate that the new MS student will be working on realized gains using block plots and the Ph.D. student will be working in the area of clonal test design and analysis.

2. The 2000 Contact Persons’ Meeting will be hosted by the Weyerhaeuser Company, taking place at the Lyons Orchard. Our thanks to the Russ Pohl and the Georgia Forestry Commission for hosting the 1999 meeting. Further thanks are due to Russ and also to John Branan for a most informative tour of the Flint River Nursery and Orchard. All of us benefited from John’s expertise in nursery operation and management.

Research Projects

Tim listed broad areas of research and the current effort placed in these areas. The intent of the presentation was to gain insight into cooperator interest in the topics and to determine research projects which were desirable thus assuring that the CFGRP staff is placing appropriate emphasis on these areas.

1. Tree Improvement: CFGRP is continuing improvement efforts for slash and Florida loblolly pine with no further improvement planned for longleaf or sand pine.

2. Support of Tree Improvement: Plots, orchards and experiments are being established at the Austin Cary Memorial Forest to preserve valuable genetic material, to provide demonstration to industry and other ACMF visitors, and to serve a research and educational role for both graduate and under-graduate students. Thanks to The Timber Company for donating the site preparation. Cooperators also indicated concerns about gene conservation for longleaf and sand pine.
3. *Seed Orchard and Propagation Research:* Current experiments in this area include slash pine seed orchard monitoring and slash pine top grafting. The CFGRP intends to cooperate with the Seed Orchard Pest Management Committee in installing pesticide studies. Cooperators noted that propagation of longleaf pine is still problematic.

4. *Taxa Comparisons:* The MS student starting in August will be working on realized gains in slash pine using block plots. The hybrid study which was measured this year at age five will be re-measured at age eight.

5. *Applied Quantitative Genetics:* For slash pine, Best Linear Unbiased Prediction will be used to predict new R50's and volume breeding values. For Florida loblolly pine, Ryan Atwood is analyzing wood properties and growth, and Tim will begin an analysis aimed at understanding g x e for volume with the possible prediction of breeding values by zones. CFGRP members are reminded that the staff is available to do in-house analyses and help with breeding and deployment strategies.

6. *Theoretical Quantitative Genetics:* The new Ph.D. student will focus on clonal experimental design and analysis. Dudley will continue to develop the GAREML analysis program. The staff intends to pursue the interface of quantitative and molecular genetics with projects in major genes for rust resistance in slash pine and marker-enhanced breeding when opportunity and resources are available.

**Fiscal Matters**

1. The budget for fiscal year 98-99, the projected budget for fiscal year 99-00, and the proposed budget for 00-01 were presented. The proposed budget for 00-01 was accepted without change.

2. A letter of appreciation is to be sent by Hank Page, chair of the Executive Committee, to the Director of the School of Forest Resources and Conservation, Wayne Smith, thanking him for his support of the CFGRP.

**Policy Matters**

Session moderated by David Adams.

1. *Ownership of Material:* Si Jahromi wished to add a sixth point to the draft concerning elite populations developed from CFGRP material by CFGRP members. If independently developed from the cooperative the material belongs to the developer. Motion to adopt by Charlie Chase with a second by Hank Page. The vote was unanimous. Tom Fox expressed continued concern about CFGRP material being placed on state lands, *i.e.* ACMF. There was some discussion on this matter with no resolution.

2. *Entrance of New Members:* Full member remains the only membership category for the CFGRP, *i.e.* no reduction in dues or in-kind support. The issue of compensatory payments and special projects for new members was
addressed. The general opinion was that the director should have the power to decide what should be required of new members, but that it is in the best interest of the cooperative to have a written policy. The executive committee will draft a written policy of requirements for the entrance of new members.

3. **Access to Tests and Materials:** After some discussion, it was agreed that an easement document should be drafted by the executive committee. This agreement, while not necessarily legally binding, should set a precedent for access which most organizations would honor. Documents from WGTIP, NSCU-ITIC and others will be reviewed for pertinence.

4. **Distribution of CFGRP Breeding Values to Non-Members:** There was a spirited discussion concerning the distribution of published CFGRP breeding values to non-members. While there was general agreement that no one would distribute the breeding values along with clonal identification, no consensus was reached on specific language which would deal with possible exceptions. The matter awaits further resolution by the executive committee.

**CFGGRP Hybrid Studies**

Results from the 5th year measurements were presented.

1. Comparing taxa means to unimproved slash: a) only improved slash, the slash by loblolly hybrid and improved loblolly had better rust resistance; b) only improved slash and improved loblolly had better survival; and c) all six taxa had better individual height and volume growth.

2. Comparing treatment means: a) the low treatment had higher survival than the high treatment; b) rust infection was higher in the high treatment; and c) individual volume in the high treatment was almost twice that of the low treatment.

**Austin Cary Memorial Forest Plantings**

Four different types of plantings are scheduled for the Austin Cary Memorial Forest in the year 2000.

1. The base-line slash pine seed orchard will preserve unimproved slash pine selections for future research.

2. Row plots of advanced-generation full-sib families and clones of slash pine will provide a backup location for these families as well as demonstration of genetic differences.

3. Block plots of different taxa within levels of cultural treatment will demonstrate advances made in volume growth from three levels of improvement, three levels of cultural treatment and six pine taxa (longleaf, improved slash, unimproved slash, unimproved loblolly, the best Atlantic coastal plain loblolly family and the best Florida loblolly family).
4. Bald and pond cypress seedlings have been established in fifth acre plots under two spacings and five levels of culture to demonstrate the influences of silviculture and genetics on cypress productivity.

**Clonal Testing of E. grandis**

Results from the Ph.D. project of Luis Osorio were presented.
1. This unique analysis combined clonal and seedling data.
2. The results demonstrated that performance as seedlings may not be strongly indicative of performance as rooted cuttings for volume.
3. Results for wood density were very similar between cuttings and seedlings.

**Slash Breeding and Testing Update**

1. Polymix crossing was completed in 1999.
2. The polymix Series II tests are scheduled for establishment in December of 2001.
3. Full-sib crossing has been extended one more year for those cooperators that still need to finish a few crosses.
4. Cooperators are reminded to send breeding updates to Dudley to help the staff in planning tests and crosses.

**New Florida Loblolly Pine Selections**

Photographs of some of the new Florida loblolly selections were shown and progress in selection noted. Many promising stands have been located.

1. Dudley will be coordinating the selection effort and cooperators should inform him of the areas in which they are selecting.
2. Mark Davis will be aiding the selection effort by providing help in interfacing with the water management districts.

**Breeding Florida Loblolly Pine**

Cooperator interest was assayed concerning three possible projects with Florida loblolly pine: a) actively managing the main population, b) making new selection in the second generation tests, and c) managing an elite population

1. Cooperator response was positive to all three projects.
2. The CFGRP staff will begin planning these projects.

**Executive Committee**

The executive committee now consists of:
Hank Page, Chair  
Siroos Jahromi, Future Chair  
David Adams, Past Chair  

Our thanks to the 1999 executive committee (Clem Lambeth, past chair; David Adams, chair; and Hank Page, future chair) for their leadership during the past year. Extra effort was required in these positions this year because of the work on CFGRP policies. Special thanks to Clem Lambeth who rotates off the committee this year.