UNION CAMP REFORESTATION PROGRAM

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Introduction

This is about like old home week for me. I participated in and benefited from the Nurserymen's conferences for a number of years and then got involved in some other things and lost touch. I think the last conference I went to was in Wilmington and some of you know that's been a few years ago. It's good to be able to look around and see old classmates, such as Jim Barnett, Clark Lantz, Frank Bonner, and people like Terrell Brooks, Jim Wynens, Tom Dierauf, Carl Muller, and others that I've worked with in the past but haven't had much contact with in recent years. I appreciate being asked to be on the program this morning.

Clark asked me to talk to you about Union Camp's regeneration program. I am not sure how interesting this might be to you; I can assure you I will be brief. Clark sent a memo to the speakers and panel members on the program, instructing us to stay on schedule about five times in that memo and three of those instructions were underlined, so I will stay on schedule.

Organization

I think, before I get into our regeneration program, it might be well to put things somewhat in perspective about Union Camp Corporation.

We're not the biggest paper company in the country; the last I heard we ranked somewhere near tenth in the industry. We are fairly well known in this part of the country, and I guess I could say we are the biggest in Savannah, with apologies to Continental.

Actually, the Savannah Mill, about a mile up the river from where we are now, is purported to be largest in the world, with a daily production of 3,000 tons of pulp. In addition to this unbleached mill, we have another unbleached mill at Montgomery, Alabama, an unbleached mill in Monroe, Michigan, a bleached mill in Franklin, Virginia, and have recently broken ground for a new bleached mill at Eastover, South Carolina. Obviously, a major part of our Woodlands responsibility is to keep these mills supplied with wood.

Woodlands is also very closely associated with our Building Products Division. We've got about 13 company-owned saw mills or plywood mills of one kind or another in Virginia, North Carolina, Alabama, and Georgia, and Woodlands is charged with keeping them going as well.

We are into a number of other things, most of which are associated with land and wood products, such as chemicals, bags, boxes, real estate development, and so on.

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Well, enough of that. I better spend what time I have talking about our Woodlands operations.

Our Woodlands Division is headquartered here in Savannah. Greely McGowin, our Woodlands Vice-President, and Dick Mordecai, and General Manager of Woodlands, have their offices and staff at the Savannah Mill complex. The Woodlands Division is organized in four operating regions: the Alabama Region at Montgomery, the Franklin Region at Franklin, Virginia, the Savannah Region, headquartered here in Savannah, and the new Eastover Region at Eastover, South Carolina.

The Savannah Region includes our Woodlands operations in Georgia, Florida, and South Carolina, and is the largest of the four; of the 1.7 million acres of Company land in the Woodlands Division, about 1.1 million are in the Savannah Region. Most of what I tell you this morning about our regeneration work will refer to Savannah Region operations because that is what I am associated with and know a little about.

Site Preparation

We are regenerating 30,000 to 35,000 acres to pine land annually in the Savannah Region. Virtually all of this is artificial regeneration following clearcutting. We feel we have an intensive program, and a good program. Our Woodlands Division mission is to "provide an adequate supply of wood at a competitive cost to our user mills and to optimize the financial return of our Company land." We try to practice what we call "site-specific" forestry, i.e. we try to maximize wood production and do this as economically and efficiently as we can.

Every acre we regenerate receives at least one mechanical site preparation treatment and usually two. We shear the rougher sites with V-blades or KG blades and follow this with raking the material into windrows. This work is done with D-7 and D-6 size tractors. We call the combination of these two treatments "Land Clearing" and we do this on about half the acres we plant. This is expensive work and we don't do any more than we feel we have to. Our regeneration budget for 1982 is about 32,000 acres; our land clearing budget is about 14,800 acres.

The alternative treatment to land clearing is chopping, usually done by pulling 10-foot single-drum choppers with heavy rubber-tired skidders, either Franklin 195s or Cat 528s. Chopping is considerably less expensive than land clearing and we think it is a good first treatment on the lighter soils where the debris and brush is less of a problem. Our chopping budget for 1982 is about 15,000 acres.

The first treatment, land clearing or chopping, is usually followed by flat harrowing with off-set harrows or bedding with bedding harrows, pulled either by D-6 size tractors or skidders. I should tell you that our site preparation work is designed to accommodate mechanical tree planting. We machine plant every acre we can.

Burning is also an important part of our site preparation work. We burn the windrows following the land clearing operations and we broadcast burn the residual debris following chopping. This is done before we do the subsequent flat harrowing or bedding.

Tree Planting

All of our tree planting is contract work and practically all of it is machine planting. Of the 32,000 acres for 1982, we budgeted about 31,200 acres of machine planting and less than 1,000 acres of hand planting. The only hand planting we do is where it is too wet or too rough to plant with machines. The machine planting is done with drag type or three-point-hitch planters pulled with farm tractors.

We try to be as smart as possible with species selection and prescribe species based on the best knowledge we have on soils, drainage, and other species site relationships. At present we probably average about 65% lob-lolly, 30% slash, and 5% longleaf and sand pine in the Savannah Region.

We also try to prescribe spacing as best we can considering site, species, and disease incidence. Our spacing ranges from a low of about 600 stems per acre to a high of something over 900 stems per acre.

Soils Mapping

The newest part of our regeneration work is our soils mapping program. We undertook, a couple of years ago, an objective of soils mapping all of the land under our control, both fee and long term lease land. We have a Soils Supervisor and he has a staff of two soils technicians. The program is moving along pretty well. We are giving the highest priority to lands which will be regenerated within the next year or two; our objective is to map all of our land within the next five to ten years. We think the information from the soils mapping work will be very useful in all phases of our forest management work, including species selection, site preparation treatments, water control, and road construction work.

Nursery and Seed Orchard Operations

Our Tree Nursery is located at Bellville, Georgia, about 60 miles west of Savannah. You are going to have a chance to visit Bellville this afternoon so I am not going to say much about it at this point except to tell you we feel it is an efficiently-run operation and that Paul Riggs and Bill Pryor are doing a good job growing high quality pine seedlings at favorable costs. We have expanded the Bellville operation through the years and are presently growing about 50 million pine seedlings annually.

Our tree improvement work got started back in the mid-50's and we are self-sufficient now for all of our seed requirements for our regeneration programs.

We have almost 400 acres of established seed orchards, most of which are located in the vicinity of Bellville. Eventually, all of our orchard production for the Division will be located there. We collected something in excess of 13,000 pounds of seed from the orchards last fall including a considerable amount of 1-1/2 generation rust-resistant seed and some second generation seed.

Cultural Treatments

Time is getting on; there are two or three things I want to mention briefly.

We believe very strongly in prescribed burning and burn every acre we can; averaging about 100,000 acres a year in the Savannah Region. Most of this burning is by conventional means but we are becoming more and more involved in "mass-ignition burning." We burned about 15,000 acres like this last year and our plans are to double this next winter. It is an effective method of getting a lot of acres burned at a reasonable cost.

Fertilization is also becoming a more and more significant part of our pine management work. It is generally in two phases, the application of ground rock phosphate on young plantations or the application of high nitrogen analysis fertilizers on established stands. We are presently fertilizing about 15,000 to 20,000 acres of pine plantations annually.

About everything I have said so far refers to pine management. I should tell you that our folks in Franklin are just as intensive in hardwood management or more so. I won't get into the hardwood management program in Franklin because of time limitations and also because it is more in Jake Stone's domain than in mine. I will tell you that our hardwood nursery in Virginia is presently growing about 1,800,000 hardwood seedlings annually and planting about 3,000 acres a year in their hardwood regeneration work. Here in Savannah we are just beginning to get into some meaningful hardwood management work. At this point, it is all natural regeneration following clearcutting. We regenerated about 1,000 acres last year and will probably do about that for the next several years.

Conclusion

I've skimmed over this pretty quickly and didn't take time to go into a lot of detail about much of it. I expect that most of you are doing many or most of the same kind of things we are doing. We sure don't claim to know all the answers. We are trying to do whatever we can to maximize timber growth and to control costs. It's a real challenge to keep these in balance but we feel we are doing as good a job as we know how. We also realize that what we know is not enough. If we are to produce the wood Union Camp expects from us in the future, we not only have to do a good management job but we have to continue to develop and refine the technology. We are working at it.