Albuquerque Tree Nursery[1]

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Abstract.--Discusses the trials and tribulations of setting up a new nursery based on the construction of a nursery in Albuquerque, New Mexico.

The Albuquerque Nursery is located in a semi-arid desert environment, at an elevation of approximately 5,000 feet. We are in a wide-bottomed draw several hundred feet above the Rio Grande flood plain.

The native vegetation previously on the site was scattered clumps of native grasses and a few widely scattered low growing shrubs. We have an alkaline soil with a pH of 8+ and alkaline irrigation water from wells on the site with a pH of 8+ also. We have a large arroyo (a deep ragged ditch) bisecting the site toward which the bed areas are slightly sloped. The normal annual rainfall in the area is 8 inches much of which usually occurs during the late summer as thunderstorms.

The winds in the Nursery come from two general directions (your right or your left). We have recorded spring winds up to 50+ MPH during April and winds of 30-40 MPH daily from March to mid-May are common.

Humidity on the site varies from 90% during a thunderstorm to 7% at other times. 100 degrees F is not uncommon during mid-summer and 0 degrees F is not uncommon during midwinter.

Now, with all these plus factors going for us you would think that getting a conifer nursery off and running would be a snap.

In the beginning, we had planned to have a large greenhouse complex with solar heat, plus enough lath house to handle our greenhouse production. This stayed in the plan until we got through the design phase. When the "powers that be" saw the price estimate we immediately went into a holding pattern on the greenhouses. But, now we are going to be able to amortize buildings over 40 years instead of the usual 20. This makes the cost of all nursery construction taste a lot different.

We had an engineer who had never seen a nursery before but learned quickly to COR a construction contract being built by a company that had never seen a nursery that had been designed by an A&E firm that had never seen a nursery. Needless to say we've had some interesting times. Some, if not all, of what was constructed actually worked.

We have the first totally solar heated seed extractory and we plan to incorporate solar heating into our office and commons buildings when they are built.

As we have progressed through the labor pains we have actually developed an organization that I believe is a challenge to older established nurseries. We are not afraid of new ideas and concepts since everything most of my people see every day is new and startling.

Quite frequently we do not give credit where it is due, but without the outstanding support of the Regional Forester, my Forest Supervisor and their related staff units, we would have had to "pack it in" several years ago.

Region Three had little except the desire and determination to develop their own nursery. We have requested and, so far, have never been turned down when we have asked for out-ofRegion help.

Region Six loaned us their Mechanical Engineer, Region Five has done all of our design refinements and electrical inspections, Tinus and Jenkinson are always available and willing to help with their best educated guesses. MEDC has been on call and available any time we have called on them.

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All the USFS nurserymen have been more than willing to help me expose and train our people, as well as share their equipment with us.

If you haven't already noticed I haven't discussed anything yet relating to surviving outplanted seedlings. I believe this is where most nurserymen find themselves today. We no longer have the time nor the expertise to sit on the tractors or run the irrigation system. This is done by the people who actually grow the trees.

This really comes home to you when you realize no one notices when you're not at the office except the clerk. But let your number one equipment operator or labor supervisor be gone and it leaves quite a hole. This is the way it should be, this is what we are paid these fantastic salaries for.

Our present organization consists of a production assistant, Mr. Leaford Windle, who is with us today. Under Leaford we have an equipment supervisor and three operators; an irrigation supervisor and six irrigators. We also have a labor supervisor under Leaford who coordinates our labor force, plus two labor leaders and seven laborers. We have a fulltime maintenance supervisor who has been able, so far, to keep things glued together. We are also blessed with an administrative assistant, a purchasing and inventory clerk and a receptionist-T$A clerk. We have a seed technician to operate the extractory and seed bank and a trainee that came to us with several years in computers.

Our present facilities consist of the seed extractory, storage buildings, shop building, and the irrigation system. We are supposed to let the contract for the packing shed before October 1 of this year and we hope to be able to pack in it a year from this winter. If our plans and hopes hold up we should have an office building and a commons (people) building by the end of another year.

And now Mr. Leaford Windle will describe for you the strokes we are using to paint the fence.