

Nursery Networks

LUSTR Co-operative, Inc.

Mission

To determine and execute research priorities and provide technical guidance, scientific liaison and support services for those involved in container seedling production and plantation establishment.

Brief Historical Background and Current Programs

In the late 1980's, Ontario tree seedling growers received regional funding from the provincial government for the provision of technical services. The Thunder Bay Tree Seedling Growers Association used this money in 1988 to create a technical services operation, under the direction of James Reid, of Inno-Tec. In 1991, this service was teamed with the research efforts of Dr. Ladislav Malek, at Lakehead University, to form the "Lakehead University Seedling Technology, Research and Extension Co-operative" (LUSTRE Co-op).

By 1992, the "E" had been dropped from the Co-op's name and, when the growers' money had been fully used, they met to discuss the formation of a new and broader based co-operative, encompassing the needs of both growers and stock users. The organization would be registered, non-profit, self-funded and would provide research and extension services to its members. As of September 17, 1993, the Co-op was legally incorporated under the name "LUSTR Co-op Inc" (**Figure 17**). This name is not an acronym, as the head office is no longer located at Lakehead University. We continue, however, to maintain strong contacts within the university and access many of their services. Although the head office is located in Thunder Bay, Ontario, LUSTR Co-op is a national organization. Currently, LUSTR Co-op members include tree seedling growers, timber companies, tree plant contractors, associated supply companies and researchers from across Canada. LUSTR Co-op is privately funded, but government and university representatives sit on the Board of Directors.

Staff

LUSTR Co-op has contractual agreements with two consultants, Dr. Irwin Smith and Karen Watt, MSc. to carry out the aims and objectives of the Co-op. Irwin serves as the Administrative and Research Director, while Karen is the Research Scientist.



Figure 17. The LUSTR Co-op is a nursery cooperative that provides applied research and technology transfer services to container seedling growers across Canada.

Co-operators

LUSTR Co-op has nineteen members, consisting of 11 tree seedling growers in Ontario and Manitoba, 3 timber companies, 1 tree plant contractor, and 4 allied supply companies. Membership is open to anyone involved in seedling production or plantation establishment anywhere in the world, and includes Active, Associate, and Honorary Memberships. Seven members serve on the Board of Directors, for one year terms, as elected by the members-at-large.

Research

LUSTR Co-op has an active research program, which is designed to involve the membership as much as possible. Rather than focusing on "in-house" research at the LUSTR Co-op office, our approach is to run trials at members' nurseries and in members' forest management areas. Projects are undertaken which are of interest to the larger membership, however, individuals may fund proprietary trials, provided that the results are made available to the entire Co-op. Work completed thus far has explored seed priming, root egress of seedlings in different soil types, chlorophyll fluorescence, HPLC analysis of pigments, ebb and flow production of containerized tree seedlings, stock quality assessments, wetting agents, chlorine as an algicide, copper root pruning, slow release fertilizers, calcium nutrition and mycorrhizal inoculation of black spruce seedlings.

Technology transfer

Technology transfer is almost as important as research to LUSTR Co-op members. Due to the enormous geographical distances between members, the Co-op's

office acts as a distribution center for information. All research is compiled in reports, available upon request to the membership. A bi-monthly newsletter is published which summarizes current research results, LUSTR Co-op business, conference proceedings and upcoming meetings. Advertising space and subscriptions are available through the LUSTR Co-op office. A January conference, held in conjunction with our Annual General Meeting (AGM), and a summer workshop are held annually to allow open interaction between the members, industry, government and scientists. Visits are made to the members periodically by Irwin and/or Karen to better address their needs.

Program Development

Research priorities are discussed every year at the AGM and are under the direction of the Research Committee. In order to expand the knowledge base, expertise and funds of LUSTR Co-op, increased membership is one of the Co-op's main goals. Irwin and Karen are encouraged to attend international and national meetings in order to increase awareness of LUSTR Co-op and its work and to pass along information to the members.

For more information on LUSTR Co-op, contact:

Irwin Smith or Karen Watt

LUSTR Co-op

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WWW: <http://www.baynet.net/~lustr>

SNTI Home Page:

"willow.ncfes.umn.edu/snti/snti.htm"

We continue to work on the Seedlings, Nurseries, and Tree Improvement (SNTI) home page, adding information and improving the content. In fact, it will have changed again by the time you read this. If you haven't visited us yet, I thought that I would give you a brief overview of what you will find when you reach our home page. The first panel that

you will see (**Figure 18**) lists the 6 major sections, each with its own "button" represented by a tree seed. Click your mouse on these buttons and you will go to the following:

The Seedling, Nursery and Tree Improvement (SNTI) Program

This section lists our objectives in creating the home page, tells who we are, what geographic areas we serve, and what services we provide (**Table 6**). You will see that some of us have our E-mail addresses highlighted in blue, which means that you can send us a self-addressed memo by just clicking on the address.

Forest Nursery Notes—News and Information Service

This section lists the last several issues of FNN and a link called "Search the Forest Nursery Reference Database". Click on the January, 1997 issue and you'll go to the cover page (which looks just the same as the hard copy) and, when you click on "Table of Contents", you can go anywhere in the issue. We're also going to include a Literature Order Form so that you can order articles from any of the recent issues. We hope to publish the July, 1997 issue in a few weeks, and eventually to have all past FNN issues on-line.

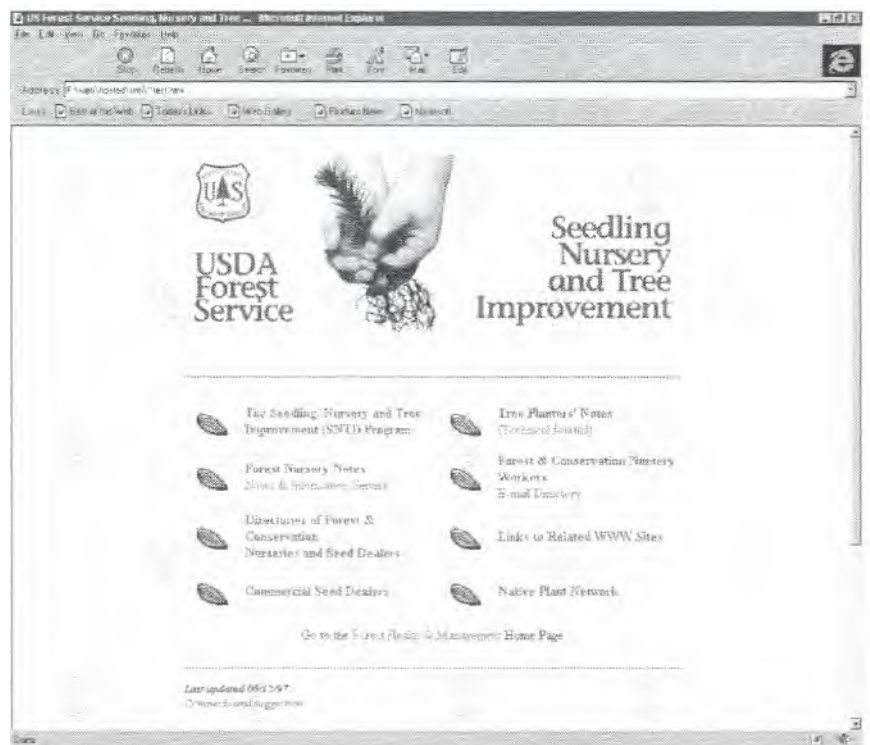


Figure 18. The Seedlings, Nursery, and Tree Improvement home page contains a listing of technical services, including Forest Nursery Notes.

If you choose "Search the Forest Nursery Reference Database", you can do a literature search of the FNN database which currently contains almost 8,000 articles that have been listed in past issues. Instructions for ordering articles is also included.

Directory of Forest & Conservation Nurseries

Our intent in this section is to maintain an up-to-date listing of all the nurseries in the US. We started by posting all the information that is currently in the national nursery directory - "Directory of Forest and Conservation Tree Nurseries in the United States - 1994 edition". We've arranged the statistics by State or Territory, so you can either click on the postal abbreviation for your State or on the State itself on the US map (**Figure 19**). The information is presented in a table that includes Nursery Name and Address, Ownership Type, Stock Type, and Current and Potential Seedling Distribution. For those nurseries with E-mail addresses and Home Pages, these also will be listed so that customers can contact them on-line. Write, FAX, or send an E-mail message to Aleta or Tom if you would like to list your nursery, update your listing, or add an E-mail or Home Page link - our addresses are provided on the inside cover.

Commercial Seed Dealers

When it is finished, this section will contain the same information that is in the national seed dealers' directory - "Commercial Suppliers of Tree and Shrub Seed in the United States" (1995). Seed dealers are listed alphabetically along with reference codes that will allow the user to check which species of seeds that they carry. As with the nursery directory, customers will be able to link directly with those dealers who have E-mail addresses and Home Pages. Contact us if you would like to be added.

Tree Planters' Notes—Technical Journal

This section will eventually contain the latest issues, but currently features a form for ordering TPN.

Forest & Conservation Nursery Workers—E-mail Directory

The intent of this section is to allow browsers to contact people working in forest and conservation nurseries or research facilities. To add your name, send your E-mail address to us by FAX, snail mail, or you



Figure 19. Addresses and production information about forest and conservation nurseries can be accessed on the Seedlings, Nurseries, and Tree Improvement home page by clicking on the State postal code on the US map.

just click on "Send the URL (address) to us" if you want to send us the information to us on-line. Eventually, we hope that this directory will serve as a central reference point to facilitate E-mail communication.

Links to Related WWW Sites

This section contains listings of forestry-related World Wide Web (WWW) home pages. For now, we've just listed them in alphabetical order but will eventually work out some more rational organization. If you would like to list your nursery or company web page, click on "Send the URL (address) to us" link or mail or FAX the information to us.

Native Plant Network

The Native Plant Network is a new service through which we hope to encourage growers to share information about how to propagate native plants. We have designed a Propagation Protocol form which contains information on the entire propagation process. An example is given for bur oak (*Quercus macrocarpa*), and we encourage you to download the blank form and submit it with information on any natives that you are growing. Note that you can also include graphics, so if you have good photos or slides of your seedlings, send them and we'll try to scan them. We will review the information and then post it to this location, giving credit to you. If you would like to correct or add propagation information about any of the listed species, send that to us also. (See the "Propagating Native Plants" section in this issue for more discussion).

Table 6. Contact list from Seedlings, Nurseries and Tree Improvement (SNTI) Home Page

Technology Transfer Services	Region of Responsibility	Who To Contact
Technical Assistance about Forest and Conservation Nurseries Forest Nursery Notes Container Tree Nursery Manual Proceedings of Nursery Meetings	US and International	Tom D. Landis USDA Forest Service Cooperative Programs PO Box 3623 Portland, OR 97208-3623 Tel: 503-808-2344 Fax: 503-808-2339 E-mail: nurseries@aol.com
Technical Assistance about Tree Improvement and Genetic Resources Technical Assistance about Forest and Conservation Nurseries	US and International Southeastern US	Clark Lantz USDA Forest Service, Cooperative Forestry 1720 Peachtree Road NW, Suite 811N Atlanta, GA 30367 Tel: 404-347-3554 Fax: 404-347-2776
Technical Assistance about Forest and Conservation Nurseries Technical Assistance about Tree Improvement and Genetic Resources	Northeastern US	Ron Overton USDA Forest Service, S&PF Forest Resources Mgmt. 1992 Folwell Avenue St. Paul, MN 55108 Tel: 612-649-5241 Fax: 612-649-5238 E-mail: overt002@maroon.tc.umn.edu
Technical Assistance about Tree and Shrub Seed	US and International	Bob Karrfalt USDA Forest Service National Tree Seed Laboratory 5156 Riggins Mill Road Route 1, Box 182-B Dry Branch, GA 31020 Tel: 912-751-3552 Fax: 912-751-3554
Editor—Tree Planters' Notes	US and International	Rebecca Nisley USDA Forest Service 51 Mill Pond Road Hamden, CT 06514 Tel: 203-230-4304 Fax: 203-230-4315 E-mail: misley@ct2.nai.nei

Well, that completes the tour of the SNTI home page. Check us out the next time that you are surfing the Web and be sure and let us know of any improvements or additions.