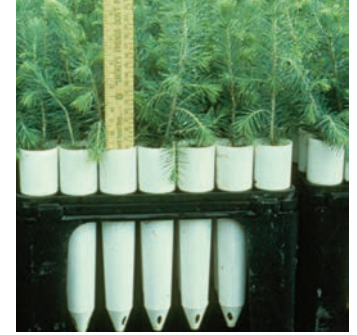
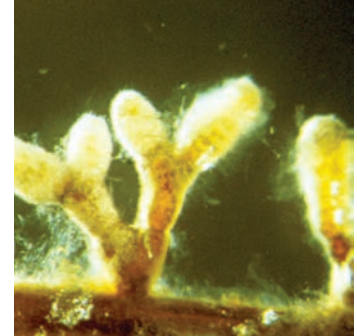


Seedling Processing, Storage, and Outplanting



Volume One Nursery Planning, Development, and Management (1995)

Volume Two Containers and Growing Media (1990)

Volume Three Atmospheric Environment (1992)

Volume Four Seedling Nutrition and Irrigation (1989)

Volume Five The Biological Component: Nursery Pests and Mycorrhizae (1990)

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The Container Tree Nursery Manual

Volume Seven Seedling Processing, Storage, and Outplanting

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The Container Tree Nursery Manual

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Preface

The Container Tree Nursery Manual consists of seven volumes that have all been published under the same series number: USDA Agriculture Handbook 674. Writing began in the late 1980s, with the first volume published in 1989. Subsequent volumes were published at increasingly longer intervals with the seventh and last volume taking over 10 years to complete (fig. 1).

Each volume contains chapters on closely related subjects concerning the production of trees and other native plants in containers. The volumes can be accumulated and used as a complete nursery manual, or they can be used separately by specialists needing information on a particular subject. Because several subjects must be discussed in more than one volume, there will be some redundancy in the manual. Such repetition is justified, however, because most readers will be using the manual as a technical reference and will not be reading the entire text.

The Container Tree Nursery Manual has been functionally organized to follow the normal sequence of nursery development, seedling propagation, and outplanting. Volume one discusses the various steps that should be followed in developing a nursery facility. Volume two is concerned with the selection of types of containers and growing media. Volume three and volume four analyze the “limiting factors” that affect seedling growth and discuss how they can be manipulated in container nurseries. Volume five examines the various biological organisms

that can affect seedlings, either negatively as pests or positively as mycorrhizae. Volume six shows how to develop growing schedules and how seedlings are propagated through the three growth phases. Volume seven covers the time from when the crop is hardened-off and ready for harvest to when they go in the ground.

The seven volumes are structured around an outline of numerical organizational headings that enable the reader to locate a specific subject quickly, without referring to an index. The general outline of volume and chapter titles is as follows:

Volume One—Nursery Planning, Development, and Management

- Chapter 1 Initial Planning and Feasibility Assessment
- Chapter 2 Site Selection
- Chapter 3 Nursery Design and Site Layout
- Chapter 4 Environmental Control and Safety Equipment
- Chapter 5 Service Buildings and Equipment
- Chapter 6 Nursery Management
- Chapter 7 Troubleshooting Nursery Problems

Volume Two—Containers and Growing Media

- Chapter 1 Containers: Types and Functions
- Chapter 2 Growing Media

Volume Three—Atmospheric Environment

- Chapter 1 Temperature
- Chapter 2 Humidity
- Chapter 3 Light
- Chapter 4 Carbon Dioxide

Volume Four—Seedling Nutrition and Irrigation

- Chapter 1 Mineral Nutrition and Fertilization
- Chapter 2 Irrigation and Water Management

Volume Five—The Biological Component: Nursery Pests and Mycorrhizae

- Chapter 1 Disease and Pest Management
- Chapter 2 Mycorrhizae

Volume Six—Seedling Propagation

- Chapter 1 Crop Planning
- Chapter 2 Seed Propagation
- Chapter 3 Vegetative Propagation
- Chapter 4 Seedling Development: The Establishment, Rapid Growth, and Hardening Phases

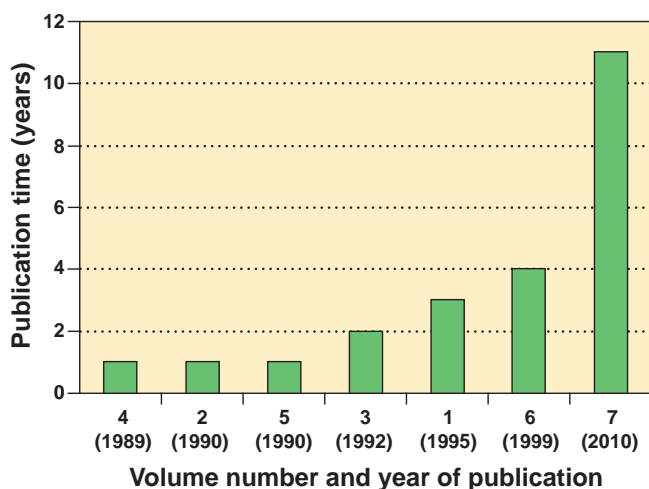


Figure 1—Years required to write each volume of *Agriculture Handbook 674*.

Volume Seven—Seedling Processing, Storage, and Outplanting

- Chapter 1 The Target Plant Concept
- Chapter 2 Assessing Plant Quality
- Chapter 3 Harvesting
- Chapter 4 Plant Storage
- Chapter 5 Handling and Shipping
- Chapter 6 Outplanting

This manual is based on the best current knowledge of container nursery management and should be used as a general reference. Recommendations were made using the best information available at the time and are, therefore, subject to revision as more knowledge becomes available. Much of the information in this manual was primarily developed from information on growing western and southern conifer seedlings in the United States. Because of the wide variation in individual species responses, container nursery managers will need to adapt these principles and procedures to their own crop requirements. There is no substitute for individual experience, and recommended cultural practices should be tested before being implemented on an operational scale.

Trade names are used throughout the manual, but only to provide examples, and no endorsement by USDA of specific products, or exclusion of equally suitable products, is implied. The mention of specific pesticides is intended only for general information and should not be construed as an endorsement. Because of frequent changes in pesticide registration and labeling, the reader should check with local authorities to make sure that an intended use is both safe and legal. Remember that pesticides can be harmful to humans, domestic animals, desirable plants, and fish or other wildlife if they are not handled or applied properly. Use all pesticides selectively and carefully, following the label directions. Follow recommended practices for the disposal of surplus pesticides and pesticide containers.

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Chapter 4 - Plant Storage

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Chapter 6 - Outplanting

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The Forest Service initially purchased a limited quantity of hard copies of each volume for free distribution but many of the earlier volumes are out of print. Because of the cost of reprinting in color, Stuewe and Sons has reprinted volumes in black and white. All of the volumes have also been published as electronic books ("e-books") in Adobe PDF format. Both hard copies and e-books can be purchased from either of the following sources; contact them for current availability and prices.

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