

**STATE OF RHODE ISLAND AND  
PROVIDENCE PLANTATIONS.  
STATE BOARD OF AGRICULTURE.  
SOME SUGGESTIONS FOR RHODE  
ISLAND APPLE GROWERS**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649707959

State of Rhode Island and Providence Plantations. State Board of Agriculture. Some Suggestions for Rhode Island Apple Growers by A. E. Stene & John J. Dunn

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd.  
Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

[www.triestepublishing.com](http://www.triestepublishing.com)

**A. E. STENE & JOHN J. DUNN**

**STATE OF RHODE ISLAND AND  
PROVIDENCE PLANTATIONS.  
STATE BOARD OF AGRICULTURE.  
SOME SUGGESTIONS FOR RHODE  
ISLAND APPLE GROWERS**



State of Rhode Island and Providence Plantations.

---

---

STATE BOARD OF AGRICULTURE,

JOHN J. DUNN, Secretary.

---

SOME SUGGESTIONS

FOR

RHODE ISLAND APPLE  
GROWERS.

---

A. E. STENE.

---

Abstract from Report of State Board of Agriculture for 1909.

U.S. DEPT. OF AGRICULTURE  
BUREAU OF PLANT INDUSTRY

PROVIDENCE, R. I.

E. L. FREEMAN COMPANY, STATE PRINTERS.

1910.



PLATE I. Russets—"Look good enough to eat!" After R. I. Exp. Sta.

## CONTENTS.

Introduction.....	99
The Financial Outlook in Orcharding.....	100
Cost of Establishing an Orchard.....	100
Income from Orchards.....	102
Orcharding in Rhode Island.....	105
Present Status of Industry.....	105
Adaptability of Rhode Island for Apple Growing.....	106
The Supply and Demand for Apples in Rhode Island Markets.....	106
Purchase of Nursery Stock.....	108
Varieties.....	110
Soil and Site.....	113
Preparation of New Land.....	114
The Planting of the Orchard.....	115
A General Plan.....	115
Laying out the Orchard.....	115
Interplanting and Distance Apart of Trees.....	119
Number of Trees Required to Set an Acre of Ground at Given Distances.....	120
General Suggestions Regarding Planting.....	120
The Mulch and the Clean Culture Systems.....	121
Mulch System.....	122
Clean Culture System.....	123
Implements Used in Cultivation.....	123
Cover Crops.....	125
Pounds of Fertilizing Constituents Produced by One Acre Each of Hairy Vetch and Cowpea by Growth of Three Months.....	126
Green Product Which may be Produced in Growing a Cover Crop from July to October, and the Amount of Certain Fertilizing Constituents per Acre.....	127
Yield of Green Forage per Acre, and Fertilizing Ingredients in Crops and Roots in Certain Legumes.....	128
Cross-Pollination.....	129
Bees as Agents in Cross-Pollination.....	134
Pruning.....	135
Time to Prune and Tools.....	137
Thinning.....	138
Orchard Fertilization.....	139
Comparative Amounts of Fertilizing Elements Used by Apples and Farm Crops.....	139
Plant Food Removed in 20 Years of Cropping (Round Numbers).....	140

Insects, Plant Diseases and Spraying.....	143
Insects Injurious to Apples.....	145
Borers.....	145
Scale Insects.....	145
Bud Moth.....	147
Tent Caterpillars.....	147
The Fall Web Worm.....	148
Plant Lice.....	148
The Canker Worm.....	148
Apple-Leaf Trumpet Miner.....	149
The Codling Moth.....	149
The Apple Maggot, or Railroad Worm.....	149
The Plum Curculio.....	150
Plant Diseases.....	151
Apple Scab.....	152
Canker.....	152
Leaf Spots.....	153
Blight.....	153
Spray Remedies.....	153
Insecticides.....	153
Fungicides.....	155
Protection Against Mice and Other Rodents.....	155
The Renewal of Old or Neglected Orchards.....	156
Causes of Failures.....	158
Remedies.....	159
Dwarf Apples.....	159
Harvesting and Marketing.....	161
Picking.....	161
Grading.....	164
Kinds of Packages.....	165
Packing in Barrels.....	165
Packing in Boxes.....	168
Co-operative Packing and Marketing.....	171
Marketing by the Individual Grower.....	176
Storage.....	177
Apple By-Products.....	178



## LIST OF ILLUSTRATIONS.

### PLATES.

- I. Russets.—“Look Good Enough to Eat.”
- II. Boss Homestead, Scituate, R. I.  
Fig. 1.—Types of Neglected Apple Trees.  
Fig. 2.—Apple Tree Dating Back to Revolutionary Times.
- III.  
Fig. 1.—A Well-Managed Orchard, owned by E. Cyrus Miller, Haydenville, Mass.  
Fig. 2.—A promising Crop on Rhode Island Trees.
- IV. Orchard Planting Plan.
- V. Orchards of E. Cyrus Miller, Haydenville, Mass.  
Fig. 1.—The Beginning of An Orchard.  
Fig. 2.—The Result of a Few Years' Growth and Work.
- VI. Cultivated Strips between Rows of Trees.
- VII.  
Fig. 1.—Rye Cover Crop.  
Fig. 2.—Nature's Plows—Rocks no Obstacle.
- VIII. Orchard in Bloom.
- IX.  
Fig. 1.—Use of Extended Disk Harrow in Orchard.  
Fig. 2.—Unsymmetrical and Partially Seedless Fruit.
- X. Spraying Apparatus.  
Fig. 1.—Nozzles and Other Accessories.  
Fig. 2.—Tank Pump.  
Fig. 3.—Barrel Pump.  
Fig. 4.—Power Sprayers.
- XI. Fruit from Sprayed Tree.
- XII. Oyster-shell Scale.
- XIII.  
Fig. 1.—Round-headed Apple-tree Borer.  
Fig. 2.—Pupæ of Codling Moth under a Piece of Apple-tree Bark.
- XIV. An Orchard Well Sprayed with Lime Sulfur.
- XV. Apple Scab.

## PLATES.

## XVI.

Fig. 1.—Corn-stalk Tree Protector.

Fig. 2.—Wire-netting Tree Protectors.

XVII. Result of a Determined Attack on a Neglected Apple Tree.

XVIII. Orchard of Rev. J. E. Hawkins, East Greenwich, R. I.

Fig. 1.—A Determined Attack on the San José Scale.

Fig. 2.—The Result.

## XIX.

Fig. 1.—Different Forms of Trained Fruit Trees.

Fig. 2.—Dwarf Trees in Nursery.

## XX.

Fig. 1.—Fancy Paper Lining for Head of Barrel.

Fig. 2.—Two Forms of Box Packs.

XXI. Ye Ancient Cider Mill and Press.

## FIGURES.

1. Method of Staking Out an Orchard in a Rectangular Field.
2. Planting Board.
3. A Good Form of Orchard Single-tree.
4. Use of Planting Board.
5. Traceless Farm Harness.
6. Smoothing Harrow.
7. Clark's Double Cutaway Disk Harrow.
8. Clark's Cutaway Harrow Extended for Cultivating Under Trees.
9. Spring Tooth Harrow.
10. Orchard Cultivator.
11. Pollination of Apple Trees by Bees.
12. Scaffold Branches Well Arranged and Poorly Placed
13. Hand Pruning Shears.
14. Pruning Saw.
15. Long-handled Pruner.
16. Pole Pruner.
17. Tree Scraper.
18. Apple Maggot.
19. Apron Bags for Pickers.
20. Different Forms of Presses for Barrel Packing.
21. Table for Box Packing.
22. Press for Box Packing.

## SOME SUGGESTIONS ON APPLE GROWING IN RHODE ISLAND.

---

BY A. E. STENE.

---

### INTRODUCTION.

During the last few years there has been an awakening of interest in the growing of apples throughout the country. New England has been no exception, and at the present time the writer is receiving numerous inquiries, almost every day, verbally and by letter, from people in various parts of the State who are studying the question of apple growing.

This bulletin is written in the hope that it may answer some of the many questions which the people are asking. The subject of apple growing is a very large one, and it is manifestly impossible to cover it thoroughly in a bulletin, or even in a single book. There are also a great many mooted questions which must be left to the future to settle. These points should be borne in mind in reading the bulletin, and the directions herein given should be taken as suggestions merely, and not, except possibly in some cases, as the final word on the topics discussed.

Advice can usually be given only in general terms. A locality or farm is a problem unto itself, and after the prospective grower has exhausted all possible information, oral and written, he must set to work to solve the specific problems of his own capabilities and of his own farm.

It should also be remembered that while we can judge a good deal of the future through a thorough knowledge of the past, yet no hard and fast rules or directions for all times can be based on past ex-