Name: ____________________________________________

4H Age Group: ___Junior ___Intermediate ___Senior

Number of Years in Citrus Tree Project: __________

County: ___________________ Club: ___________________

COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF FLORIDA, INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES, Larry R. Arrington, Director, in cooperation with the United States Department of Agriculture, publishes this information to further the purpose of the May 8 and June 30, 1914 Acts of Congress; and is authorized to provide research, educational information, and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions, or affiliations. Single copies of extension publications (excluding 4-H and youth publications) are available free to Florida residents from county extension offices. Information about alternate formats is available from IFAS Communication Services, University of Florida, PO Box 110810, Gainesville, FL 32611-0810.

Created by Gary England Multi County Fruit Crops Agent Lake County, Ryan Atwood and Dr. Timothy Spann
This project book is designed for use with the Central Florida Fair Citrus Tree growing project. You should begin keeping records as soon as you obtain your tree. It is not necessary to write records in this book right away; you may keep them in a separate journal or calendar and transfer at a later date.

In the past there were multiple project books. Now there is one project book for all participants no matter their age or number of years in 4H citrus tree project. This project book is a “living document” meaning that you will be adding to it every year. For example if you have been in the project for 10 years you would have 10 years worth of projects and tree care records included in your project book.

**Annually the completed project book should include:**

- A cover page of your own design that reflects your personality
- Your citrus project activity
- Tree care records from throughout the year
- Project pictures throughout the year
- Project story

**Information regarding the fair and project book:**

1) Your project book **must** be completed by the Central Florida Fair citrus tree project pre-judging held prior to the contest and sale on 4-H Day.

2) You will be expected to submit your completed project book when you enter your tree for pre-judging.

3) Project books will be returned at the Central Florida Fair to attendees or to county 4H agents. If not attending please make arrangements to have your project book picked up. **SEE BELOW**

4) Any leftover project books will need to be picked up in Lake County. Mr. England is not responsible for lost or missing project books. They are the 4H participant’s responsibility.

5) If you have any questions regarding your project tree or this book, you should ask your 4-H Agent or plan to ask at one of the scheduled workshops.

For update info, project book, dates, maps visit: [http://lake.ifas.ufl.edu/4-H/4h_tree.shtml](http://lake.ifas.ufl.edu/4-H/4h_tree.shtml) or the project Facebook® Page [https://www.facebook.com/groups/151679630989/](https://www.facebook.com/groups/151679630989/)
**Make sure you check with your LOCAL County 4H Agent about dates for record book judging**

4H Citrus Tree Project Activities

You must choose one (1) activity a year and not repeat the same activity until all of the below projects have been completed at least once.

1) Write at least a five (5) page paper (typed) on a citrus topic. Make sure to cite references! A minimum of five (5) references are required.

2) Create a poster using computer software on a citrus topic. Electronic file of poster to be emailed or sent on disk to Mr. England. The poster will be put on 4H citrus tree project website. Print an 8 x 11 paper copy of poster for project book.

3) Take a citrus related Field Trip write at least a two (2) page report (typed) with pictures. Possible field trip ideas below:
   a) Citrus nursery
   b) Citrus grove/grower
   c) Citrus packhouse
   d) Citrus juice plant
   e) Citrus Hall of Fame at Florida Southern College
   f) Winter Garden Heritage Museum
   g) Florida Agricultural Museum

4) Create at least a five (5) minute video on a citrus topic to be posted on 4H citrus tree project website.

5) Do a science project related to citrus and write a minimum one (1) page report include data, pictures, etc. This can be a science project for school.

6) Give a five (5) minute demonstration/talk on a citrus topic to your peers at one of the 4H citrus tree project scheduled events.

7) Put on a citrus tree project clinic for your 4H club and write a minimum one (1) page report which includes pictures or create video.

8) Create a citrus tree “game board” and enter it into your county fair, or the Central Florida Fair.

**Citrus Topics:**

1. **Diseases**- Describe current diseases in Florida citrus, their effect on trees and fruit, how they are controlled in the home and commercial setting, challenges they present to Florida citrus production. What is pesticide resistance and how is it managed? Include photos. Diseases include: Citrus Greening, Citrus Canker, Black Spot, Melanose, Alternaria, Scab, Blight, Tristeza.

2. **Insects and Mites**- Describe current pests in Florida citrus, their effect on trees and fruit, how they are controlled in the home and commercial setting, challenges they present to Florida citrus production. If they are vectors (carriers) of any diseases. What is pesticide resistance and how is it managed? What is Intergrated Pest Management (IPM)? Insects include: Asian Citrus Psyllid, Citrus Leafminer, Citrus root weevils, Rust mite, Spider mite, etc.

3. **Varieties and rootstocks**- Describe the varieties of citrus grown in Florida. Include why each variety is grown and what it is used for. Describe citrus plant improvement. What types of breeding techniques are being used in the genetic improvement of citrus? Include information any new or recently released varieties. Include any information on older varieties that are no longer used in citrus industry and the reasons why they fell out of favor.
4. **Fertilization**—Discuss current fertilization practices in citrus production. Include information on citrus best management practices (BMP’s) and why they are important. Discuss different types of irrigation systems such as drip, micro-sprinkler, overhead, etc. Review information on slow release fertilizers, fertigation and granular fertilizers.

5. **Irrigation**—Discuss current irrigation scheduling techniques for citrus production. Discuss different types of irrigation systems such as drip, micro-sprinkler, overhead, etc. Explain the need for water conservation in today’s grove.

6. **Cold and freeze protection**—The historical influence of cold weather on the citrus industry in Florida. What are critical temperatures for Florida Citrus? How do citrus growers combat cold weather?

7. **Citrus Economic Impact**—What is the citrus industry’s importance to Florida’s economy and your home county’s economy? What does the industry do to support Florida’s economy? What types of jobs does the industry support and what are their duties? How much does it cost to maintain a citrus grove?

8. **New Technology**—How is new technology changing the citrus industry? How is citrus production using GPS systems, variable rate technology and computer satellite imagery? How are mobile computing devices being used? What other new technologies might be utilized in the future?

9. **History of Citrus in Florida**—Describe the history of citrus in Florida, include how it was introduced, and where, by whom? Discuss where the citrus industry started in the state and why it moved. Talk about some of the legendary figures of citrus and how they became citrus barons. You can include any discussion on the citrus industries impact on Florida from the past to the future.

10. **Mechanical Harvesting**—Describe mechanical harvesting efforts in Florida citrus. Why is mechanical harvesting important? What have been some of the major problems? Discuss agricultural labor issues, immigration and the importance of labor in agriculture.
Care and Maintenance

Make sure to keep complete records on your activities. This section can be brief, but more detail is better. You do not have to put every irrigation event, for example you can say irrigated from 4/1-10/1 every day, then every other day for the rest of the year 10/1-4/1, etc.

<table>
<thead>
<tr>
<th>Date</th>
<th>Type of Activity</th>
<th>Purpose</th>
<th>Cost if Any</th>
</tr>
</thead>
<tbody>
<tr>
<td>00/00/00</td>
<td>Pruning</td>
<td>Remove excess growth</td>
<td>$0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Type of Activity</th>
<th>Purpose</th>
<th>Cost if Any</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Cost $________
Expenses: (Tree, container, potting media)

<table>
<thead>
<tr>
<th>Date</th>
<th>Item</th>
<th>Cost $</th>
</tr>
</thead>
<tbody>
<tr>
<td>00/00/00</td>
<td>Bought Tree and Pot</td>
<td>$10.00</td>
</tr>
</tbody>
</table>

Total Cost $_______

Closing Inventory: (Depreciate all remaining supplies-suggested depreciation is 10% per project year)

<table>
<thead>
<tr>
<th>Item</th>
<th>Number of</th>
<th>Present Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Cost $_______

1. Opening Inventory $_______
2. Expenses + $_______
3. Closing Inventory - $_______

Total Project Cost = $_______
Project Story

This should be a written record of how this year’s citrus tree project has gone for you. It should include your thoughts, experiences or ideas on how to grow citrus, how to make the citrus tree project better, what you have learned this year, what you have learned over all of your years in project. Include any pest or other problems that you experienced. Include thoughts on your project activity such as how did it go, was it fun, did you learn anything?

Make sure to include what events you attended such as field day or packinghouse visits. Also provide your impressions of these events. Do you use the website, Facebook site, etc. Why or why not? This is your opportunity to share what you have learned, liked or disliked. Like any other school story make sure to have an introduction, body and conclusion to your story.

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

7
Project Pictures

Attach project pictures, or create a small scrapbook...Use this section to place the various pictures of your citrus project throughout the year. You should include pictures of your tree, along with pictures of you doing your care practices such as planting, pruning, fertilizing, irrigating and spraying.

Include thoughts on your project activity such as how did it go, what were you doing and why in certain pictures. (ex: Removing orange caterpillar from tree, taking tree in for cold protection, etc.).

Show pictures from whichever topic or activity you choose. Be creative, use captions and descriptions and most of all have fun and make this your own!