PA FLAX
20 PROJECT 20
FARMS • COMMUNITY • FABRIC

Square Yard Project | Grower's Journal

The PA Flax Project | *Our Mission*

We're on a mission to change the textile industry and create economic growth that's good for the planet.

We work for a world where beauty and growth don't come at the expense of people or the planet. In our vision of the future, work is meaningful. Economic opportunities heal the earth. And an American linen industry thrives based on healthy soil and profitable farms.

Why Flax? | *Magical Properties of Flax*

If you've agreed to join our square yard project, you're likely just as smitten and excited as we are but just in case you'd like a short list you can impress your friends and family with, here goes:

- Easy to grow- flax tolerates a variety of soils and requires very few inputs
- Because flax is densely planted to produce fine fiber, it out competes most weeds
- Removes toxins from the soil including metals such as lead
- Produces abundant blue flowers benefitting pollinators
- Produces high quality, durable fabrics

A Note From Us | *Thank You*

Thank you for joining us for our annual Square Yard Project! We love connecting with all of you, teaching and learning together. We make friends and gain significant insights through this project each year. We hope you'll enjoy record-keeping here in this journal and consider sharing your journal with us and other flax friends in our Square Yard Project.

Our dream is huge but together we are mighty. Thank you for joining us.

- Heidi and Emma, Co-founders

-Janell, Director of Education

-Bill, Director of Agriculture

Flax Journal | *Contact Information*

Full Name: _____

Farm/Business Name: _____

Trial Location Address: _____

_____

Primary Contact Email: _____

Primary Phone: _____

Seed Stock

Variety	
Source	
Seed Certification	
Germination Rate	
Seed Date (Best Used By)	

Planting Conditions

Planting Date	
Weather/Temperature	
Soil Test Data	Please attach data sheet.
Seedbed Preparation (Tillage, Preirrigated, Amendments)	

Planting Method

Planting Method (Equipment, hand broadcast, etc.)	
Row spacing, if any	
Seeding Rate	
Planting Depth (Covering Technique Used)	
Effectiveness of Seed Coverage/Placement	

Plant Life Cycle (Phenology)

Emergence Date	
2 Week Estimate of Plant Growth (Number leaves/ brances, etc.)	
First Bud Visable	
First Flower, Peak flower, End of flowering	
Seed Stages - Milky, Soft Dough, Hard Dough*	

* **Milky:** before seed is fully developed, when crushed a milky white substance will appear
Soft Dough: the seed is still soft with little or no liquid present
Hard Dough: the seed is hard when squeezed and fully developed (this is when you want to harvest!)

Harvesting

Harvest Date	
Weather/Temperature	
Soil Moisture Content	
Harvest Method (Pulling, Equipment)	

***For fiber test plot see attached retting field guide and journal*

Crop Yield

Biomass per unit area	
Grain/seed yield per unit area	
Seed per pound	
Crop quality assesments (height, branchy?)**	

Week 1 Date: _____

Average Temperature	
Precipitation	
Irrigation (Dates/Rates)	
Weed Control and Cultivation	
Pest Control (Dates, Rates, Practices)	
Additional Notes	

Week 2 Date: _____

Average Temperature	
Precipitation	
Irrigation (Dates/Rates)	
Weed Control and Cultivation	
Pest Control (Dates, Rates, Practices)	
Additional Notes	

Week 3 Date: _____

Average Temperature	
Precipitation	
Irrigation (Dates/Rates)	
Weed Control and Cultivation	
Pest Control (Dates, Rates, Practices)	
Additional Notes	

Week 4 Date: _____

Average Temperature	
Precipitation	
Irrigation (Dates/Rates)	
Weed Control and Cultivation	
Pest Control (Dates, Rates, Practices)	
Additional Notes	

Week 5 Date: _____

Average Temperature	
Precipitation	
Irrigation (Dates/Rates)	
Weed Control and Cultivation	
Pest Control (Dates, Rates, Practices)	
Additional Notes	

Week 6 Date: _____

Average Temperature	
Precipitation	
Irrigation (Dates/Rates)	
Weed Control and Cultivation	
Pest Control (Dates, Rates, Practices)	
Additional Notes	

Week 7 Date: _____

Average Temperature	
Precipitation	
Irrigation (Dates/Rates)	
Weed Control and Cultivation	
Pest Control (Dates, Rates, Practices)	
Additional Notes	

Week 8 Date: _____

Average Temperature	
Precipitation	
Irrigation (Dates/Rates)	
Weed Control and Cultivation	
Pest Control (Dates, Rates, Practices)	
Additional Notes	

Week 9 Date: _____

Average Temperature	
Precipitation	
Irrigation (Dates/Rates)	
Weed Control and Cultivation	
Pest Control (Dates, Rates, Practices)	
Additional Notes	

Week 10 Date: _____

Average Temperature	
Precipitation	
Irrigation (Dates/Rates)	
Weed Control and Cultivation	
Pest Control (Dates, Rates, Practices)	
Additional Notes	

Week 11 Date: _____

Average Temperature	
Precipitation	
Irrigation (Dates/Rates)	
Weed Control and Cultivation	
Pest Control (Dates, Rates, Practices)	
Additional Notes	

Week 12 Date: _____

Average Temperature	
Precipitation	
Irrigation (Dates/Rates)	
Weed Control and Cultivation	
Pest Control (Dates, Rates, Practices)	
Additional Notes	

Week 13 Date:_____

Average Temperature	
Precipitation	
Irrigation (Dates/Rates)	
Weed Control and Cultivation	
Pest Control (Dates, Rates, Practices)	
Additional Notes	

Week 14 Date: _____

Average Temperature	
Precipitation	
Irrigation (Dates/Rates)	
Weed Control and Cultivation	
Pest Control (Dates, Rates, Practices)	
Additional Notes	

Week 15 Date: _____

Average Temperature	
Precipitation	
Irrigation (Dates/Rates)	
Weed Control and Cultivation	
Pest Control (Dates, Rates, Practices)	
Additional Notes	

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Retting Field Guide & Journal

About Retting

Linen is a bast fiber that is collected from the flax plant and then spun into yarn, woven or knit. To separate the flax stem from the bast fiber, the plant is retted. Retting Flax is the process of partial biological decomposition of pectins and other components which bind the fiber, fiber bundles, and the non-fiber structures, thereby facilitating the removal of the bast fibers from the stems. In other words, the plant is rotted to the point where fibers can easily be removed but won't break. Field retting is the simplest, most environmentally responsible method and that is the method we'll describe here.

Field retting requires:

Good exposure to light
Good contact with soil
Good exposure to moisture
Laying the straw out in a consistent layer so it all rets at the same speed

Step By Step Guide

1. You can ret immediately upon harvest or dry the flax in stooks first.
2. Remove seed bolls by rippling (this step can be skipped if seed bolls are very immature or if you don't want to save the seeds.)
3. Remove any large weeds from the field.
4. Lay flax straw back on field it was harvested from in even thin layered rows that do not overlap.
5. Make sure that all the straw is in contact with the soil.
6. Turn the flax once a week to ensure even retting.
7. Turn by sliding a broom handle under the flax and flipping it over.
8. Retting will take between 3-6 weeks depending on the weather.
9. When the flax is retted, if you wind a stem around your finger, it will break on each revolution and the long bast fiber will emerge. When this happens, roll the rows of retted flax into bundles, tie loosely and store in a dry place to await processing.
10. Check often to avoid over retting your crop. Under retted flax can be retted more later. Over retted flax is a crop loss.

Flax Journal | *Retting Weekly Record*

When did you begin retting? Please check one:

☐ Retted immediately after harvest ☐ Dried in stooks first

Week 1 Date: _____

Average Temperature	
Precipitation	
Turning (Did you turn the flax this week and on what day?)	
Notes	

Week 2 Date: _____

Average Temperature	
Precipitation	
Turning (Did you turn the flax this week and on what day?)	
Notes	

Week 3 Date: _____

Average Temperature	
Precipitation	
Turning (Did you turn the flax this week and on what day?)	
Notes	

Week 4 Date: _____

Average Temperature	
Precipitation	
Turning (Did you turn the flax this week and on what day?)	
Notes	

Week 5 Date: _____

Average Temperature	
Precipitation	
Turning (Did you turn the flax this week and on what day?)	
Notes	

Week 6 Date: _____

Average Temperature	
Precipitation	
Turning (Did you turn the flax this week and on what day?)	
Notes	