



Organic grains on a small scale.

GROW YOUR OWN PANCAKES

Presented by:



DISCLAIMER

➤ Local experts:

- + Dan Jason, Salt Spring Seeds
- + Mike Doehnel (biology, trials, malting barley)
- + Tom Henry (15+ acre crops with a combine)
- + Sharon Rempel (Red Fife wheat)
- + Helen Reid (quinoa)
- + Katharina Gustavs (nutrition, cooking with grains)

➤ Other experts:

- + Gene Logsdon, Small-Scale Grain Raising
- + Carla Emery, An Encyclopedia of Country Living

OUR EXPERIENCE

- Grown grains on a small scale since spring 2008
- Launched the Island Grains project in 2009
- Offered the first grain CSA on Vancouver Island in 2010



WHAT IS ISLAND GRAINS?

- Inspired by “Small–Scale Grain Raising,” by Gene Logsdon
- Hosted by Makaria Farm (Duncan, B.C.)
- 2009: 50 families/individuals/couples grew their own grains on 200 sq.ft. plots
- 2010: 17 shareholders learned to grow their own grains, participating and sharing in the harvest of a half–acre crop of rye and wheat
- www.IslandGrains.com



50 FAMILIES HARVEST THE GRAINS THEY GREW

August 2009



GRAINIES SHOW OFF THEIR HARVEST

August 2009



CSA HARVEST

August 2010

GRAINS 101

YES, YOU CAN GROW YOUR OWN PANCAKES

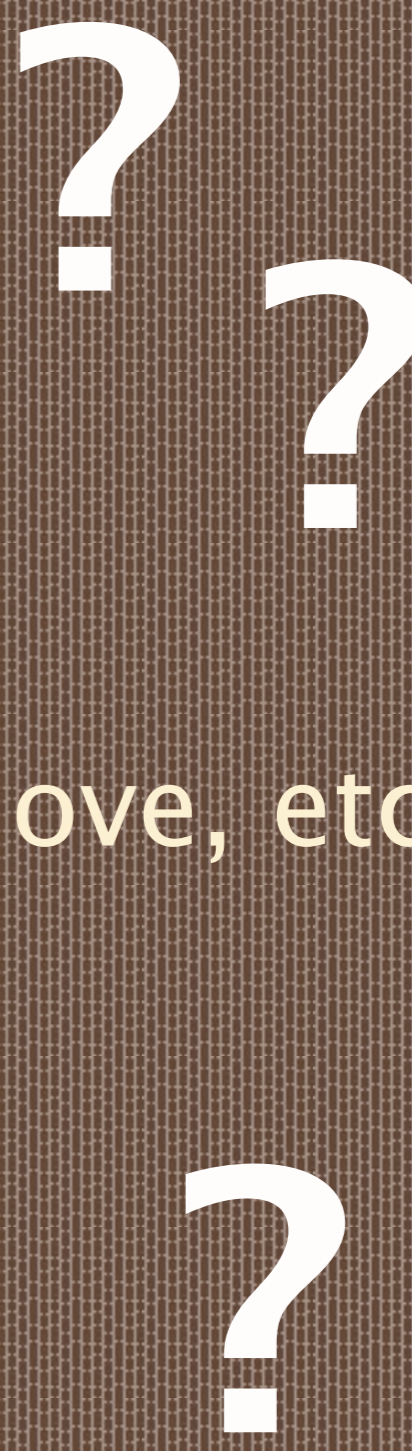


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- With an average yield, you can grow 60lbs of wheat organically on 1,100 sq.ft. (1/40 acre) of land.
- That's enough for approx. 1 loaf of bread every week for 1 year.
- You can grow 1lb of quinoa on an 11 sq.ft. plot.

THE BIG QUESTIONS

- What should/can I grow?
 - Where do I get the seeds?
 - Where should I plant?
 - How do I prepare the soil?
 - When/how do I plant?
 - What about watering, weeding, love, etc.?
 - When should I harvest?
 - How do I harvest?
 - How do I thresh & winnow?
 - What do I do with the grain?
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WHAT SHOULD/CAN I GROW?

- ✓ Wheat (including Kamut or “Polish Wheat”)
- ✓ Oats (“hull-less”)
- ✓ Barley
- ✓ Rye
- ✓ Quinoa
- ✓ Amaranth
- ✓ Flax



WHAT SHOULDN'T I GROW?

Grains that are difficult to hand thresh:

- ✘ Emmer
- ✘ Millet
- ✘ Spelt & some other wheats
- ✘ Oats (not “hull-less”)
- ✘ Buckwheat

WHERE DO I GET THE SEEDS?

- Seedy Saturday events
- Seed companies (e.g. Salt Spring Seeds)
- Local baker/miller
- Grocery stores

AVOID:

Groats, rolled, pearled, flaked

GERMINATION TEST:

Put 10–20 seeds between damp paper towels in a semi-sealed Tupperware container



GROWING CONDITIONS

- Full sun
- Water for germination & early growth, as needed
- Regular-quality garden soil
 - If you can grow carrots/tomatoes, you can grow grains
 - too-fertile soil may lead to “lodging”



HOW DO I PREPARE THE SOIL?

- If ripping up grass to prepare soil for planting, allow as much time as possible before planting grains (6 months is ideal), and plant legumes in the meantime to build soil fertility
- Prepare soil as if you're planting beets, peas or beans:
 - No big clods/chunks of soil or debris
 - Flat surface
 - Seed needs good soil contact

WHEN/HOW DO I PLANT?

- Oats: "whenever the mud dries enough in the spring to be workable" (Gene Logsdon)

September

October

November

February

March

April

May

July

Winter wheat

Fall-planted rye

Oats

Spring wheat

Spring-planted rye

Barley

Flax

Amaranth

Kamut

Quinoa

Create furrows ½" deep, 6-8" apart (to allow for easy weeding with a hoe). Drop the seeds 1" apart, cover with soil, and tamp down. Water if needed.

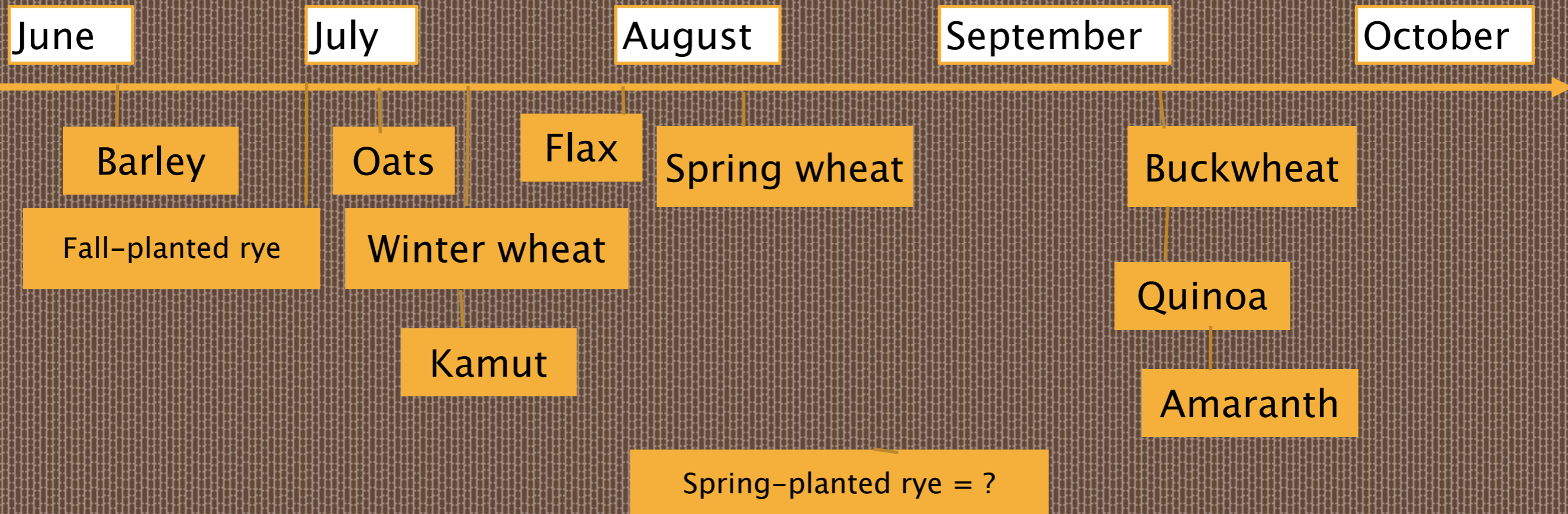
WATERING, WEEDING, LOVE, ETC.

- Watering:
 - Enough to trigger germination after planting
 - Once or twice during green-growth stage
 - Not at all for the last month pre-harvest
- Weeding:
 - Once or twice in the first month of growth when weeds are less than 1" high
 - Thin quinoa to 1 plant every 12 inches
- Love, Et cetera:
 - According to **Carrots Love Tomatoes**, chamomile increases wheat yields: plant 1 part chamomile to every 100 parts wheat. Bachelor Buttons (a flower) aids rye production when planted in a 1:100 ratio.



WHEN SHOULD I HARVEST?

- Amaranth: “when the birds start pecking at the seeds” (Dan Jason). The seeds will still be soft.
- Cereal grains: when you can’t make a dent with your fingernail, and the grain seed is crunchy, not doughy.



HOW TO HARVEST ON A SMALL-SCALE?

- **Amaranth:**
 - Cut stalks down when seeds are still soft. Allow the stalks/seeds to dry down completely in a warm, breezy, sunny, dry space (e.g. greenhouse).
- **All other grains:**
 - Using scissors, pruning shears, a sickle, a scythe, or any other sharp tool, cut the heads off the grain stalks. Grains must be as dry as possible: if they are still soft, allow the plants to dry down further, as above.



HOW DO I THRESH/WINNOW?

- Quinoa/Amaranth:
 - Wearing gloves (e.g. kitchen gloves), pinch and run your fingers down the stalk to remove the seeds.
 - “Winnow” the seeds from the “chaff” using an air compressor, hair dryer, screens, bowl-to-bowl technique, or other creative method.
- All other grains:
 - “Thresh” grain seeds from the “chaff” using a threshing box, or place the seed heads in a pillowcase and whack it with a sturdy shoe on a hard surface.



WHAT TO DO WITH THE WHOLE GRAIN?

- Save it to use as seed for next year!
- Mill into flour and use for baking
- Sprout it (soups, salads, bread, sandwiches)
- Cook it rice-style
- Store in a dry, dark, relatively cool place (e.g. cupboard)

For many more ideas, surf the web or read a whole grains cookbook.



**RED FIFE WHEAT PLANTED
OCTOBER 13, 2009**

Photo taken February 3, 2010





QUESTIONS & ANSWERS

To sign up for the Island Grains mailing list, please add your name to the sheet at our booth.

Visit www.IslandGrains.com for more information on small-scale grains, and to share your own experiences and tips.