

Overview of Farming Operation and Certified Organic Winter and Summer Squash Production

ABOUT GRINNELL HERITAGE FARM



Owned and operated by Andrew & Melissa Dunham

Andrew became interested in pursuing a career in local agriculture as an agricultural extension officer serving in the Peace Corps in Tanzania, East Africa. Andy studied Animal Ecology at ISU. He handles most of the planning, planting, transplanting, and manages the work crew while weeding, harvesting, and washing.

Melissa studied accounting at St. Catherine University in Minnesota. She handles the accounting, website, marketing, customer service, human resources, logistics, and many of our farmers markets.



ABOUT GRINNELL HERITAGE FARM



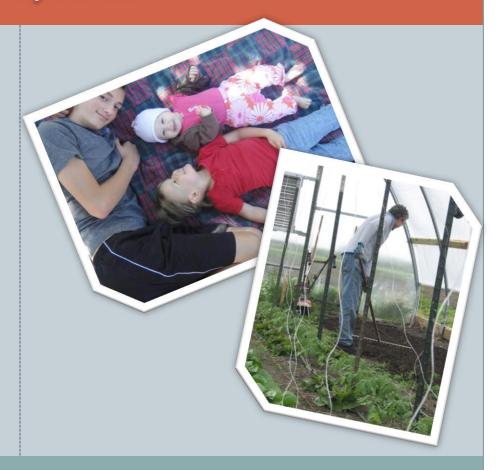
It's a Family Affair...

Collin lends a hand where needed all summer. One of his favorite tasks is packing CSA boxes while dancing. He is also in charge of mowing the lawn and tending to his little sisters when needed.

Emma, now six, and an experienced farmer, Emma enjoys cleaning irrigation parts, planting head lettuce and packing CSA Shares.

Little Leonora, loves to eat as many veggies as possible!

Aunt Janet, born and raised in Grinnell, has been an avid gardener her whole life. Janet is our primary hand weeder which enables us to harvest greens in a timely fashion. She also helps keeps tabs on Emma and Leonora.



Why Transition to Organic?

With Proper Management....

Flooding 2008

- Improves marketing options
- 2. Record keeping for better business decisions
- 3. Less exposure to harmful chemicals
- 4. Increase chance of having beneficial organisms & wildlife
- 5. Mitigate severe weather event effects



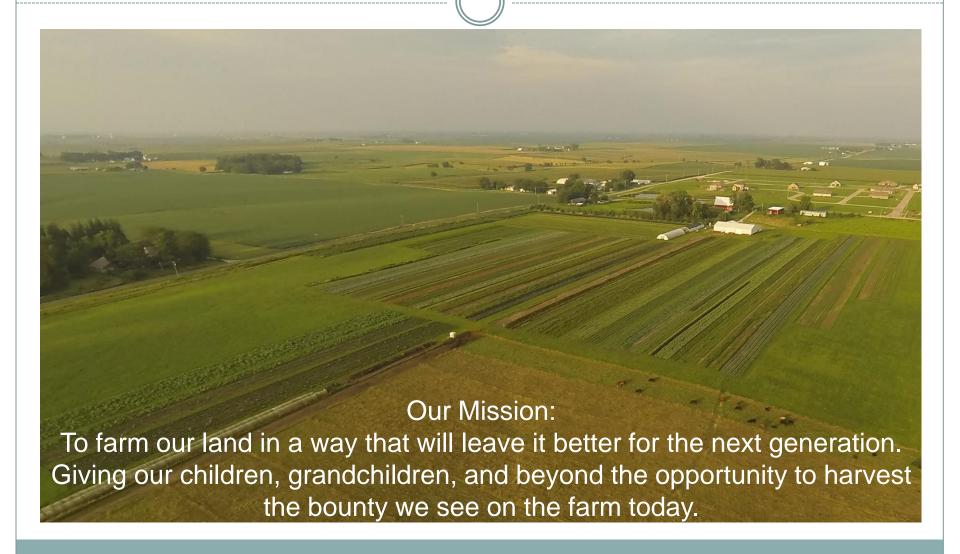
How our Farm Transitioned to Organic



Conventional row crop

- transitional hay, pasture, vegetables
- certified organic hay, pasture, vegetables, fruit & chestnut trees

Our Farm – A Birds Eye View



Aerial shot from the east



ABOUT GRINNELL HERITAGE FARM





Where We Sell Our Products:

- 1) CSA Shares
- 2) Farmer's Markets
 - Nowa City Saturday
 - Cedar Rapids Select Saturdays
 - Des Moines -- Saturday
- 3) Wholesale
 - New Pioneer Food Co-op
 - Gateway Market
 - Whole Foods Market
- 4) Meat
 - Chicken
 - Beef



FARMERS MARKET & WHOLESALE



- Des Moines, Cedar Rapids & Iowa City Markets
- New Pioneer Food Coop, Whole Foods Market
 - Carrots, Beets, Kale, Chard, Parsnips, Rutabaga, Peppers,
 Cucumbers, Zucchini, Parsley, Cilantro & More





WHAT IS CSA?



- Direct partnership between the farm and consumer.
- Consumer takes risks with the farmer.
- Receive a box of fresh produce weekly during growing season.





OUR CSA PROVIDES A WEEKLY NEWSLETER

esa news edier

volume 4 - issue 14

august 2nd, 2011



picking greens in heat

This has been the longest stretch of hot weather we have had in Iowa for some time. We have had to change our harvest schedule to get any work done with the heat and the work crew has done an excellent job stepping up to keep the produce coming in and growing. In most seasons we start work between 6 and 7 and are able to work until 5 or 6 each day. The past three weeks we have begun between 5 and 6 and worked until 3 or 4 to avoid the late afternoon heat. I did try working morning and evening one day with the work crew, but they voted to work just after lunch to keep evenings free for family and unwinding. The day usually begins by harvesting the crops that are most heat and sun sensitive, like the kale, salads, and any other leafy green. The carrots, beets, and other slightly more hardy crops come out immediately after that and then the potatoes, onions, garlic, and other tolerant crops can be harvested mid- to late-morning. The after dinner time is used to weed or do tasks that are not so temperature dependent. The past few days we pulled all of the onions and shallots out of the field and into the shaded greenhouse for curing in the late morning and early afternoon. The weather certainly dictates what we can do on a daily basis. This week we have a great share even though the weather hasn't been so cooperative. We've only gotten 1.4 inches of rain since July 1st so the irrigation pump has been getting a workout and I'm really wanting to get some rain this week. Until next time, have a great week!

contents of this week's share

sugar baby watermelon	1
green top carrots	1 bunch
tomatoes	a few
green or purple peppers	1-2
green beans	1 lb
kale	1 bunch
sangre or german butterball potatoes	1 lb
celery	1
garlic	1 head
*sungold tomatoes	1 bag
sierra blanca onions	a few
And the second second	

^{*}Items will be given on alternate weeks.

possibilities for next week

We may have tomatoes, peppers, onions, carrots, sungold cherry tomatoes, potatoes, summer squash,, garlic, eggplant, melons, celery, green beans, and an herb.

weather + seeding + harvest

It's still hot, hot, hot, and humid; the cooler air tonight will be welcomed. I just ordered some more carrot seed to plant a few extra beds because the late carrot germination rate was poor in the heat.









OUR CSA HELPS BY PROVIDING RECIPES



tasty raw:

watermelon, tomatoes, peppers, green beans, carrots, celery + sungolds

grilled: tomatoes, peppers, potatoes, onion + garlic

60 min or less: <u>celery recipes</u> – great link with multiple options.

ideas 4 kids':

you tell us! send us your favorite kid recipes and we'll include them in our next newsletter. - ants on a log – our kids love this one!

90 min or less: roasted garlic potatoes roasted garlic

kale chips

> description

this recipe is usually a hit, and it's a great way to get the kids to eat their greens.

> ingredients

- 1 bunch of kale
- 1 tbsp extra virgin olive oil
- 1 tbsp sherry vinegar
- 1 pinch sea salt to taste

> directions

Preheat an oven to 300 degrees F (150 degrees C).

Cut away inner ribs from each kale leaf and discard; tear the leaves into pieces of uniform size. (I made my pieces about the size of a small potato chip.) Wash torn kale pieces and spin dry in a salad spinner or dry with paper towels until they're very dry.

Put the kale pieces into a large resealable bag (or use a bowl if you don't mind getting your hands oily). Add about half the olive oil; seal and squeeze the bag so the oil gets distributed evenly on the kale pieces. Add the remaining oil and squeeze the bag more, until all kale pieces are evenly coated with oil and slightly 'massaged.' Sprinkle the vinegar over the kale leaves, reseal the bag, and shake to spread the vinegar evenly over the leaves. Spread the leaves evenly onto a baking sheet.

Roast in the preheated oven until mostly crisp, about 35 minutes. Season with salt and serve immediately.

notes about recipes

items underlined on this page are recipe links. feel free to send us your recipe ideas. we'll happily include them in the newsletter.







above right: ants on a log

P2











Goals

- o To provide for a 300 member CSA
 - ▼ 4-6 distributions of summer squash
 - ▼ 4-6 distributions of cucumbers
 - × 3-4 watermelons
 - × 2-4 cantaloupe
 - × 8-10 delicata winter squash
 - x 5-8 butternut squash
- Any additional yield available for wholesale and markets
- Grow quality produce with minimal harm to pollinators and beneficial organisms

Current Method

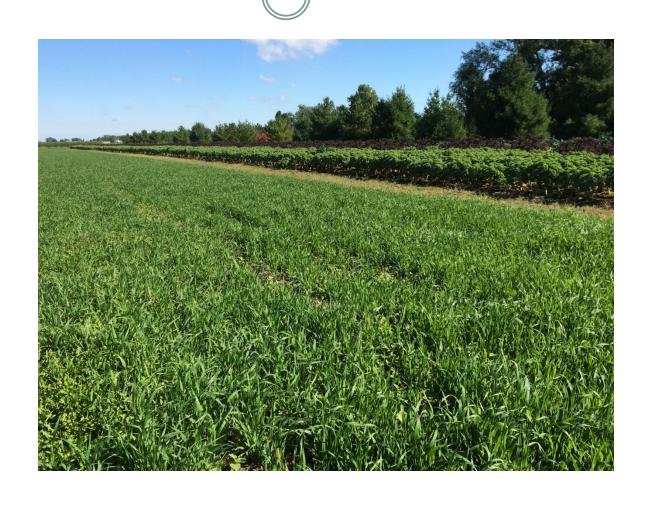
- o Plan in winter
- Seed in greenhouse, in succession
- Prepare field
 - **x** Till
 - ➤ Bed shape: plastic mulch and drip tape on raised beds
 - Mulch with straw or hay in between beds
- Harden off transplants
- Transplant with water wheel transplanter
- Cover with row cover
- Uncover

Current Method (continued)

- Cultivate, if no mulch
- Monitor for pests and disease
 - ➤ We use Surround WP, to help deter pests and prevent sunscald
- Harvest
- Proper post-harvest handling
 - Summer squash go into "warm" cooler immediately
 - Winter squash get cured in greenhouse or packing shed, then stored in "warm" cooler when space allows and temps drop
- o Wash, if necessary, with brush washer
- Pack

- Challenges with Current Method
 - Pests
 - × Cucumber beetles (early), squash bugs (late, not much of a problem), vine borer (not much of a problem for us)
 - Incorporating cover crop prior to plastic mulch when wet
 - Costs of laying plastic and plastic disposal
 - Timing, if weather conditions delay field work
- Likely Changes to Current Method
 - Roller crimping rye and/or vetch and minimum-till transplanting (not sure what pest pressure would be like)
 - Planting a trap crop
 - More pollinator habitat

Cover crop of winter rye and hairy vetch



Seeding Schedule

	G	RINNELL	HER	TAGE	FARM	- SEEDIN	VG + T	RANSP	LANTIN	NG SCHEDULE
YEAR	2013									
Seeding		Seeding Date -	100 CT						Bed Feet	
Date - Plan	Variety Name	THE RESERVE OF THE PARTY OF THE		The sales of the sales	British Co.	Date - Actual		Field	Length	Seeding/TP Notes
04/21/13	Arugula - 02				4/21/2013	1	(blank)	(blank)	50	Use last year's seed
The state of	Ruby Streaks Mustard Gree				4/21/2013	-	(blank)	(blank)	25	Use last year's seed Seed Marketmore 76 or
04/22/13	Genuine Cucumber -	0-1-0	(5)		5/20/2013	-	(blank)	(blank)	400	
	Snow Leopard Melon -		a		5/17/2013		(blank)	(blank)	150	Use last year's seed
	Sugar Baby Watermelon —		5		5/17/2013	7	(blank)	(blank)	590	Healeston de l
	Sultan Cucumber —	- 5-1-13	5		5/20/2013	-	(blank)	(blank)	400	Use last year's seed
14/25/13	Basil - 2 5-	-1-13		9	5/23/2013		-	The state of	100	use old seed
	Chioggia Guardsmark Org		Direct S		4/25/2013		-	1	210	Use last year's seed
		- 5-1-13	4		5/23/2013	7	(blank)	(blank)	100	2 rows per bed, 6 inche
	Red Ace Beet - 2				4/25/2013	-			500	seed plate 8.5, use old
2500000	Space Spinach - 4	-	Direct Se	Direct Se	4/25/2013	-	(blank)	(blank)	500	use old seed
	Service and the service of the servi	- /			4/25/2013	-	58	C	625	use old seed
	Touchstone Gold Beet-2	. /			4/25/2013	-			210	(blank)
1/28/13	Sessantina Grossa Broccoli	- Did not plan	Direct Se	Direct Se	4/28/2013	-	(blank)	(blank)	100	use old seed
5/01/13	Bishop Cauiflower - Tro	mont 5-1-13	0	2.5	5/29/2013	-	(blank)	(blank)	300	Use last year's seed
	Dunja Zucchini-1 —		(2.5)	-	5/22/2013	-	(blank)	(blank)	225	Use last year's seed
	Fremont Caulifloer - 2			0	5/29/2013	-	(blank)	(blank)	300	A CONTRACTOR OF THE PARTY OF TH
	G Star Patty Pan Squash - 1			-	5/22/2013		(blank)	(blank)	375	When out of current s
	Goldy Zucchini-1		(2.5)	- 1	5/22/2013		(blank)	(blank)	225	When out of current s
	Moon & Stars Watermelon			- 1	5/26/2013		(blank)	(blank)	500	Use last year's seed
			0		5/26/2013		(blank)	(blank)	500	Use last year's seed
	Rocky Ford Melon	2-1-	-		5/20/2013		(blank)	(blank)	375	When out of current s
The state of the s	Sunburst Summer Squash -	5-1-13	4)	5.	The state of the s		(blank)	(blank)	125	Use last year's seed
02/13	Cherriette Radish - 2		Direct S	E Direct S	€ 5/2/2013	THE RESERVE	(Dialik)	(Dialik)		

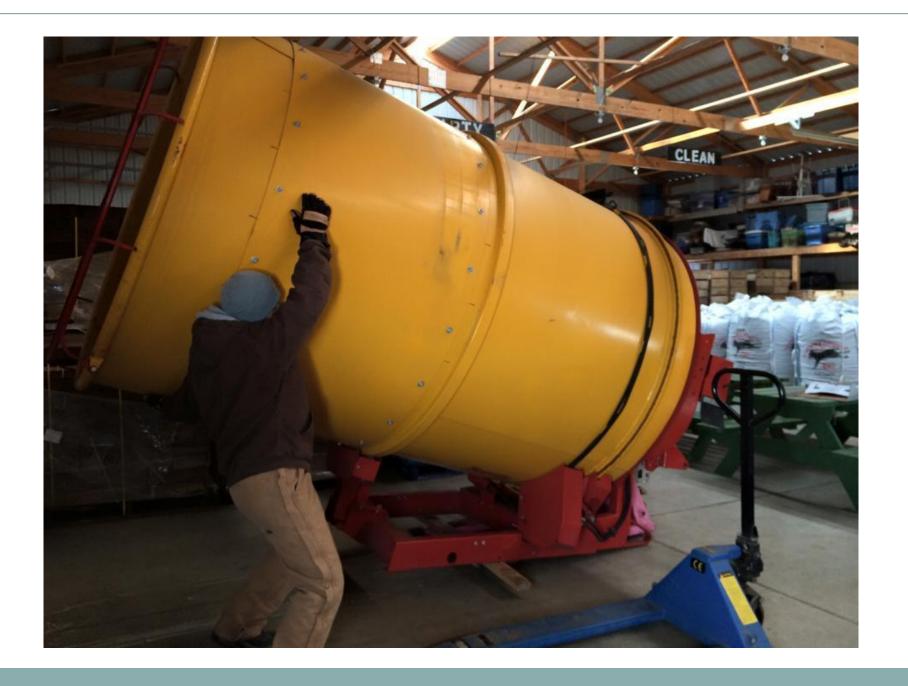


Season Timeline













































Pollinator garden later in the season



Emma and Leonora in front of hedgerow with field of sorghum Sudangrass in background







We received the Iowa Farm Environment al Leader Award in 2015



