# Part 3. Keeping (On) Track: Calendars, Accounts, Outcomes

# Our Garden Notebook – large D-ring binder containing:

- In front: Log Sheets and Garden Calendar. We keep another copy of our garden calendar posted on our kitchen bulletin board.
- Sections for each year containing:
  - Garden Metrics sheet
  - Crop Charts for summer, winter, and cover crops
  - Cover Crop Record out of which we calculate cover crop ratio
  - Bed Map (www.Jungseed.com) Garden Planning Software)
  - Individual Crop Yield Sheets
  - Summary Yield Chart
- Section for Soil Testing/Amendments
- Section on Diseases and Pest reports say, from Penn State Plant Pathology and Entomology labs
- Section on Garden Designs which includes layout sketches, designs for various devices
- Section on Trees

# Garden Log f=c/garden/log

Date 2008	Activity/Task/Observation	Bed	Time (hr/min)	Comments
3		2	3)	
		82	33	
25.		8.		
		5.0		

# Our Growing Season Calendar Keeps Us Sane ...

TASKS	W	Mar	Apr	May	Jun	July	Aug	Fall
First leafrollers, hydrangea			24	1				
Peach: prune bloom to 2wks>petal fall <sup>6</sup>			16>>>>	>>>>				
Prune>bloss: forsy,quince,mock orange7			<b>√</b>	<b>√</b>	\ \			
First dandelions bloom: plant potatoes			15-27					
Lilacs bloom			22	-4				8
Pear blossoms, D'Anjou			26			1000		
Redfree blossoms			27					
Lily of valley bloom		Land day	29	7				
Peach petal fall			30-					
Start turning main compost pile (add sugar water @ 11b/gal warm [filtered] water)			1	>>>>				
Start ant control: see folder 29 house			28					
Peonies: prevent botrytis 8				1				
Killed 1st asparagus beetles				114				
June bug out	7000			4				
Grape rot — spray Bordeaux mix 10 days before, after bloom, early June (bloom)				5 24	(313)			
Caught flying ants in living room				10				
Check for rust in domestic, wild black rasp	-50			10	V. 0 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
Spray nematodes for Japanese beetle 9				10				
First columbine blooms				10				
Bridal veil bush blooms				13				
Grape buds first visible				15				
Replace screen collars to apple, peach, apricot, cherry, plum trees				15			i i	
Peach control: footnote 4-c 10				(c)				

<sup>&</sup>lt;sup>6</sup> Peach pruning: see MG manual

Place Franking see No mandat

Blooms form on new wood from previous year, so prune after bloom.

Sign is black buds. Clean beds, add lime sulfur > 40 degrees, no rain, add ½" sharp sand

<sup>&</sup>lt;sup>9</sup> Spray for jap beetles larva when they emerge (around May 15): garden beds, iris beds, fruit tree bed, esp sour cherry, peach, grape, raspberry, sweet cherry plus adjoining grassy area.

# Garden Metrics

file=c:garden/metrics.doc

**Spacing Relationship** 

In Bed Spacing	Max # Plants/100sf	In Bed Spacing	Max # Plants/100sf	In Bed Spacing	Max # Plants/100sf	
2"	5894	7"	432	15"	84	
3"	2507	8"	320	18"	53	
4"	1343	9"	248	21"	35	
5"	833	10"	201	24"	26	
6"	621	12"	159	30"	14	

**Compost Requirements** 

Amt	Per 100 sq.ft.	Per 125 sq. ft.	Per 40 sq. ft.
1" w.	8 cu.ft/60 gals/	10 cu.ft/75 gals/	3.2 cu.ft/24 gals/
soil	12 5-gal buckets	15 5-gal buckets	4.8 5-gal buckets
1/2"	4 cu.ft/30 gals/	5 cu.ft/38 gals/	1.6 cu.ft/12 gals/
wo soil	6 5-gal buckets	7.5 5-gal buckets	2.4 5-gal buckets

Cover Cron Weights

Cover	BG:amt/	Fedco:amt/	Amt	100	sf	125 sf	40 sf	
Crop	1000 sf	1000 sf	Chosen	wt	cups			
vetch	3.4 lbs	1lb	6.8 lbs	11 oz	1.75 с	13.5 oz	4.5 oz	
rye	8 oz	3-4 lbs	8 lbs	12.8 oz	1.25 с	16 oz	5.1 oz	
oats	12.5 oz	3-4 lbs	8 lbs	12.8 oz	1.25 c	16 oz	5.1 oz	
field peas	1.6 lbs	4 lbs	4 lbs	6.4 oz	1 c	8 oz	2.6 oz	
buckwheat	26 oz	2-3 lbs	6 lbs	9.6 oz	1.5 c	12 oz	3.8 oz	
fava 8"	4 lbs		320 seeds	6.3 oz	1 c	7.9 oz	2.5 oz	
fava 6"	7.5 lbs		620 seeds	12 oz	1 7/8 c	15 oz	4.8 oz	

In col. 4 I doubled max. recommendation from BG or Fedco. If use mixture (e.g., oats, peas, vetch soil building mix), then cut each seed amount to 1/3.

#### Seedling Flat Mix Recipe (fills 2.5 flats)

10.0 gallons compost
2.5 gallons peat/sand
2.5 gallons turf loam
0.5 cups azomite
0.5 cups greensand
0.5 cups fish meal or alfalfa (nitrogen boost)

1 cubic yard ~ 200 gallons; 1 cubic foot ~ 7.5 gallons

### Conversion of cow manure weights to volumes:

- -- cow produces 20T manure/yr
- -- 2.5 tons wet manure  $\rightarrow$  1 ton dry compost
- -- weight compost: 25 lbs/cu. ft. or 675 lbs/cu. yard
- -- 100 sq.ft. bed @ 1" requires 208 lbs compost or 1 ton compost will handle 10 beds 1" deep

Crop Chart, 2007 Growing Season file=c:Garden/06CROPS

	CH=Centre Hall (364-1393)	F=Fedco	H=Houts		Ag-Star Bellville 717-935-7401	
NP: Nature's	Bellville Agway	FF=Frank	U=Under-	G=Gurneys	Carl Lingle	
Pantry	1-717-935-2148	ferd Farm	wood		466-6630 straw	

Last Frost Date: May 9 First Frost Date: Oct. 1

D= days/weeks to proj. first yield vs actual yield; TinF= Time in Flats(wks)/actual TinF; r = # rows in flat i=indeterminate, d=determinate, h=hybrid, italics: order; upright: have on hand ds= direct sow seeds n= number of seeds to plant; (n)= # desired plants

GLE O GER	-	-	or seeds to	and the same of th	-	# desired		1	
SUMMER	Source	D:	sow dat	#	time	date	date	sq ft	bed #
CROP		proj/	targ/act	flats	in	transpl:	1st yield	plant-	10
		act			flat	targ/act		ed	
onion: bng	F2439EV	65/	3-30/	1.0	5-6	5-13/	6-28/	10	3c
onion: sets 4"	Houts	??	3-30/	2.5#	6-8		7-20/	20	3c
lettuce sp	Have	6-12/	3-30/	0.4	3-4	5-5/	5-28/	20	10
Spinach	Have	43	3-30/	3r	3-4	5-2/	5-26/	5	10
Leaf beet	F3034PS	55/	3-30/	1r	3-4	5-5/	5-26/	5	3c
Bts:Detroit 1	F2182DD	60/	3-30/	1.0	3-4	5-5/	7-9/	10	3a
Bts:mangels	BG (1)	8-12	3-30/	0.5	3-4	5-1/	7-20/	10	
ct:danvers 4"	P70	75/	3-30/	1.25	4-5	5-10/	7-23/	10	3b
ct:chantenay2	BG	70/	3-30/	1.6	4-5	5-10/	7-23/	20	
Bulb fennel 10"	4556ZF		3-30/	(6)	4-5	5-10/		(3)	12
Sumo 5'	F833SO	66/	3-30	1.75	2	4-18/	6-18/	20	4b
Sugar Ann 2'	F882SU	58/	3-30	1		4-10/	- 3.	13	4b
Cascadia 2.5'	P263	48/	3-30	1		4-10/		13	4b
Mammoth M	F842MM	72	3-30	1.75		4-10/		13	4b
Collards 3	BG	70	4-1/	2r	4-5	6-1/	6-10/	20	5c
Parsley 5"	PW274	70/	4-1/	0.5	5-6	5-12/	6-20/	10	4c
dill 5"	ours		4-1/	.33	5	5-11/	7-23 seed/	5	4c,5c
caraway 6" 4	ours		4-1/	.4	7	5-14/	7-2/	10	4c
cilantro 5"	U HCSS		4-1/	0.4	5	5-11/	6-12/	10	4c
Kale	F3385WO	60/	4-1/	r=1	3-4	5-11/	7-14/	(6)	10
Pr:bells	F3706KN	70/	4-2/	n=15	7-8	6-1/	7-30/	(10)	3b
pr: hot wax	F3754HH	68/	4-2/	n=6	7-8	6-1/	7-30/	(2)	3b
Pr: jalapeno	ours		4-2/	n=4				(3)	3b
Pr: cayenne	3770CY	75	4-2/	n=4				(3)	3b
Eggplant	P154	66/	4-2/	n=8		6-1/		(4)	7d

<sup>\*</sup> flats: 22 rows x 14 cells; 23 rows x 13 cells

<sup>&</sup>lt;sup>1</sup> Increase spacing on ½ bed from 4" to 5". Count out seeds for 1 flat; may have to mix EW with DRs. <sup>2</sup> Soak in kelp overnight; if not enough chantenay, mix in danvers.

<sup>&</sup>lt;sup>3</sup> Potted up 5/1 n=14

<sup>&</sup>lt;sup>4</sup> Bleach as tomatoes and soak overnight

Source	D=	sow dat	# flats	Time	date	sa ft	bed #
200100		Same and the same and an arrangement of the same and the		100000000000000000000000000000000000000			000 %
				200000000			
					l car grace		
PV		4-4/	Direct			370	1b2,2b,2c,3b
SCL700			seed				3c2,4a2,4b,
							5a,6b,7b,7c
							12b(tomatoes)
							13 (melons)
		5-1/	Broad			250	Upper fruit
			cast				
		5-4/	Broad			200	8,10
F8231			cast				10000
Have		5-4/				30	12c
above							
Have			1-0.33	2-4	6-3/	8	3c2
			0.67		7-10/	to 80 - 2005	5b(after peas)
Have		After	Broad			60	9
		lettuce	cast				
CH		After	Broad			60	9
		lettuce	cast				
Above			Broad			250	Upper fruit
		9-1	cast				Bed
Above		9-1 to				215	Early beds: 4c2
		9-30					5a,5c, 9,10
NP		9-1 to					Later beds
		10-15			9		
Granary	17/		0.75	8	6-1/	AND COLOR	
F8302	17-26	4-1/		6-8			
F8504							
F8505	ı	1	I	I	1		1
	F8101 F8301 F8101 F8231 Have above  Have  CH  Above  Above  NP  Granary F8302 F8504	PV SCL700  F8101 F8301 F8101 F8231 Have above  Have  CH  Above  Above  NP  Granary 17/ F8302 17-26 F8504	## Tang/act	targ/act         PV       SCL700       4-4/       Direct seed         F8101       5-1/       Broad cast         F8231       5-4/       Broad cast         Have above       5-15       1-0.33 $\sim$ 6-5       0.67         Have After lettuce       Broad cast         CH       After lettuce       Broad cast         Above       8-25 to 9-1       Broad cast         Above       9-1 to 9-30       Broad cast         Above       9-1 to 10-15       0.75         Granary       17/       4-1/       0.75         F8302       17-26       4-1/       F8504	Scl   Scl   F8101	Targ/act   In flat ranspl: targ/act	PV   SCL700   4-4/   Direct seed   370   370

<sup>\*</sup> flats: 22 rows x 14 cells; 23 rows x 13 cells

- 1. Rotate cover crops! Vetches, legumes, can transmit viral diseases to other legumes (peas,
- 2. Check out tarnished plant bugs. Tania says infested red raspberries. These hang out in legumes (clover, alfalfa). See Rodale, Natural Insect and Disease Control, p. 29, color p. 264.

Soaking favas hastens germination. Soak 2-7 days, but change water twice/day
 Timothy is a perennial carbon crop. Often plant with alfalfa, for example. Can plant spring, fall. But wouldn't use it as an annual cover crop, as in oats, rye. Jan Holland uses it, may have seed.

COVER CROPS: ACTUAL BED TIME RECORD: SEPT 1, 2012-AUG 31, 2013 FALL SPRING

File=garden/cover crop record

	A section	B section	C section	sq.ft. days
1				
				125
2				125
2				
				125
3				
				125
4				123
7				
				125
5				
				125
6				123
				20
7				
				100
8	winter bed		L	120
0	winter bed			115
9				110
				50
10				
			1	50
12				
				120
13	blueberry			120
13	ordeoerry			120
			Total sq.fi	
			Max sq.ft. p	lanted: 1220

1. Max cover crop days = 274 (Mar. 1→ Nov.30). Maximum sq.ft. planted = 1,220. Therefore, max sq.ft. days = 274 x 1,220 = 334,280. Therefore, cover crop ratio = \_\_\_\_/334,280 =

### CALCULATION OF COVER CROP RATIO

### MAY 15, 2010 to MAY 14, 2011

Gene Bazan, Master Gardener, 2-24-10 Genebazan@aol.com

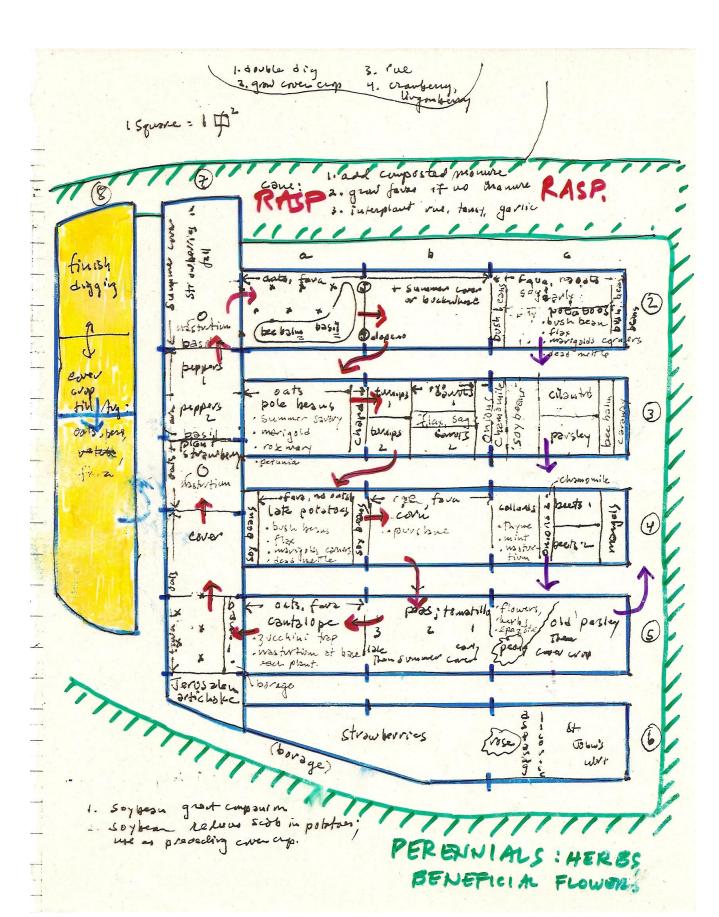
#### YEAR 1

	Landau wanta a sangara kanan ka		
Bed	SPRING-SUMMER 2010	FALL-SPRING 2010-11	Total sq.ft. days
1	Oats+vetch 5/15→8/1 = 77 days x 88 sq.ft. = 6,776 sq.ft. days	Rye+vetch $9/15 \rightarrow 11/30 = 76$ days $3/1 \rightarrow 5/7 = 68$ days. Total days = 144 x 88 sq.ft. = 12,672 sq.ft. days	19,448
2	Oats+vetch 5/15→8/1 = 77 days x x 79.2 sq.ft. = 6,098 sq.ft. days	Rye+vetch $9/15 \rightarrow 11/30 = 76$ days $3/1 \rightarrow 5/7 = 68$ days Total days = 144 x 88 sq.ft = 12,672 sq.ft. days	18,770
3		Oats+vetch $9/7 \rightarrow 11/30 = 84$ days x 61.6 sq.ft. = 5,174 sq.ft. days	5,174
4		Oats+vetch $9/7 \rightarrow 11/30 = 84$ days x 18 sq.ft. = 1,512 sq.ft. days Rye+vetch $9/15 \rightarrow 11/30 = 76$ days x 70.4 sq.ft. = 5,350 sq.ft. days	6,862
5	Oats+vetch 5/15→8/1 = 77 days x 35 sq.ft. = 2,695 sq.ft. days	Rye+vetch $9/15 \rightarrow 11/30 = 76$ days $3/1 \rightarrow 5/7 = 68$ days. Total days = 144 x 53 sq.ft. = 7,632 sq.ft. days	10,327
		Cover crop sq.ft. days	60,581
		Cover crop ratio (see notes below)	58%

#### Notes:

- 1) Maximum cover crop days = all days except those from Dec. 1 through Feb 28, or 274 days. Maximum planted sq.ft. = vegetable sq.ft. + cover crop sq.ft. = 247 + 132 = 379 sq.ft. Therefore, maximum sq.ft. days = 274 x 379 = 103,846 sq.ft. days. Therefore, cover crop ratio = 60,581/103,846 = 58%, very close to Jeavons 60% cover crop ratio.
- 2) If you want to plant fall vegetable crops (lettuce, spinach, tatsoi, garlic) as shown on the Tudek Crop Chart (totaling ~ 35 sq.ft.) then you plant oats and vetch as cover crops from 5/15 to 8/1 in the two sections shown in bed 5. This adds 2,695 sq.ft. days of cover crops.
- 3) You plant your fall cover crops in all the beds except the two "Fall Crops" beds and the spots labeled "Sod Pile." This takes discipline in keeping to the calendar plus having cover crop seed and inoculant (for the vetch) on hand. The discipline requires pulling up plants not waiting until you get the last bean or tomato, for example, and recognizing that cover crops are as important as your other crops.
- 4) The reason why you must stick to the calendar is that unless you plant cover crops early enough, they will not germinate and get established before winter. For oats and vetch, plant during September, as oats winter kill, and must therefore get in all their growth before winter kills them. For rye and vetch, you have a bit more time until mid October. Rye and vetch survive the winter and do their main growing the following spring.





# 4. Results: We Grow



- 95% of our vegetables year-'round for two people
- 60% of our fruit
- 20% of our protein (vegetable)
- 10% of our calories
- On 30 beds (~3,000 sq.ft.)
   20 of which are permaculture beds
- For ~ \$1,200/yr capital improvements + annual growing expenses, 2008-12.



Early Corn: bed 4b

Date	#	Weight	Comments
		OZ	
7/27	2	14.30	One perfect, thought kernels not quite full; other has sporadic
			undeveloped kernels, and kernels could have fattened up more
8/2	1	9.75	Perfect!
66	2	18.25	
8/3	2	17.00	66
66	2	18.00	
8/4	2	17.50	
66	2	18.00	"
8/6	5	36.00	Two have regions of shriveled-looking insufficiently developed
			kernels. Three nearly perfect except or sporadic superficial
			brown spots on kernels.
8/7	4	30.00	1/2 ear eaten by animal, though stalk undamaged.
8/8	3	21.50	Nice; minor damage on some kernels – insects?
8/9	5	31.00	Three nice. One with 1/3 undeveloped kernels on one side. One
			toothy – large, sporadic kernels.
8/27	1	4.00	Small but nice – a 2 <sup>nd</sup> ear on a stalk?
Total:	31	235.30	$(235.3 \text{ oz}/16 \text{ oz}) \times (100/40) = 37\#/100 \text{ sq.ft.}$
			This is higher than Jeavons' medium yields of 34#/100 sq.ft.
			Our highest ever was 47#/100 sq.ft.

- 1) Other charts are similar. For berries, we count # quarts, then weigh a quart and convert at the end of the season to weight/100 sq.ft.
- 2) For some crops we include a sketch. We do this for tomatoes and peas, to distinguish among varieties. We also do this when we are conducting an experiment, for example, to test yields of different varieties of carrots, or the effect of east or west side of bed planting.

C	Jeavons Yields	·99	,00	<b>'01</b>	'02	'03	'04	'05	'06	'07	'08	·09	'10
Crop	(lbs/100 sq.ft.) L -M -H					wet	wet	dry	dry <sup>1</sup>	dry <sup>2</sup>		wet	
beans, pole	30-72-108	89	64	51	493	77	94	60	103	130	104	105	
beans, cranberry	29.7 (max)			1		24					9	23	
beets, red	55-110-270			84- 147	81- 131	175	1164	72	voles	185	186		
beets, winter				56	05	34	21.3	496	53	131	88	113	
mangels	200-400-960			129	239	303	273	196					
winter mangels					07	62	75						
blueberries	19-32-75											40	
burdock	75-150-300												
carrots	100-150-1080				83	100	132	89	88	145	156	186	
winter carrots				33.6	34	65	42	52	89	74	69	120	
corn 8	17- 34- 68		33	18.9	20 10	011	26	23	35	41	47	40	
garlic	60-120-240			26	forgot	18.6	102	74	84	70	60	85	
J. artichokes 12	100-206-420					131	168	187	110	161			
onions	100-200-540			121	165	92	10413	80	119	184	112	167	
parsnips	119-238-479			43	47	19	3814	1915			11510		
peas	25-53-106			22	20	39.2	46.3	37	31	35	32	27	
potatoes 17	100-200-780	70-102	60	45	56	0				249	106	101	
raspberries <sup>18</sup>	6-12-24		29	31	29	8	11.4	13.8	12	10	2119	33	
black	•										20	20	
June red											32	58	
fall red											13	36	
squash, butternut	50-100-350		53	70	68	4420	99	65	78	5021	54	88	
strawberries	40-80-320										7422	38	
Cover Crop Ratio: 9/1- 8/31	60%	42%	33%	38%	52%	40%	28%	45%	40%	39%	42%	46%	

# Soil Mineral Chart 2012 Based on Soil Test Results 2010

Bed	Sul-po-mag 2.5#/125: 13oz/40			Iron sulfate 12oz/125: 4oz/40			Mg Sulfate 1T/gal spray 4x, My 22, Jn15, Jy15, Ag15			Sulfur 18oz/125: 6oz/40		
	a	b	c	a	b	c	a	b	c	a	b	c
1												
2												
3												
4												
5												
6			<u> </u>									
7						ļ						
8												
9												
10												
ras11										Peat +	sulfur	
12												
blu13										Peat + sulfur		
peach 14										Peat + sulfur		
junber15					~~~~					Peat	Peat	
cherry16										Peat +	Peat + sulfur	
fruit17										-	Peat + sulfur	
fruit18		H-1									Peat + sulfur	
jeavbr19										Peat:	Peat: currants	
grape20										Peat +	sulfur	
pearchr21										Peat + sulfur		
pear22				7						Peat +	sulfur	
aplelder23										Peat + sulfur		
honplm24										Peat + sulfur		
2plmapl25										Peat +	sulfur	

Note: new bag of iron sulfate is 30% iron (19.3% sulfur), 50% higher than old bag, which was 20% sulfur. Therefore, reduce applications when use new bag to 12 oz/125 sq ft.

# Other Planning Information

# Planning files:

- New Task file for with (a) items to order next year;
   (b) next year's new, special, or unique gardening tasks not on Annual or Planting calendars. We start this every year, add to it during the growing season, and review during planning period in Dec-Jan.
- Order file containing supplier order forms
- Spraying Calendar for Disease and Pest Control
- Clipboard containing:
  - Task Reminders for the week
  - Printouts of New Task file and Spraying Calendar.

# **Ordering Task**

- 1) Get new solar operated vole repeller: order in early May or so to maximize guarantee period. Good one seems to be Pest A Cator 1010S Solar Ground Rodent Repeller at:
  - a) <a href="http://www.qcsupply.com/230353-pest-a-cator-solar-ground-rodent-repeller.html?utm\_source=shopmania&utm\_medium=cpc&utm\_campaign=productfeeds">http://www.qcsupply.com/230353-pest-a-cator-solar-ground-rodent-repeller.html?utm\_source=shopmania&utm\_medium=cpc&utm\_campaign=productfeeds</a>
- 2) Get row covers using bridal veil fabric from Jo-Ann's fabric
  - a) new one for beets (106" x 82"; bridal veil was probably 44" wide x 6 yards 216" which I cut in half, and sewed)
  - b) Collards (5'x4' similar to beets, but larger to accommodate taller plants
  - c) Brussels (6' x 4', similar to collards)
- 3) New fruit trees: defer to 2014?
  - a) Jefferson filbert is immune to Eastern blight, has big nuts, and is easy to crack. Is it a shrub or a tree? http://www.burntridgenursery.com/nutTrees/index product.asp?dept=54&parent= .
  - b) Russian Mountain Ash (Jung)
  - c) Brown Turkey fig
- 4) Spikenard plant. Oikos catalog. Root beer flavor. P. 53. Check w. Tania
- 5) Reply from Chris regarding edging on his garden beds:
  - a) Our boards are 1" x 4" x \_\_\_\_\_. We specified the lengths we wanted. The wood was rough-sawn hemlock. The miller was j.g. Zook lumber, 327 Smullton Rd, Rebersburg (814-349-5749).
  - b) Two years ago the cost for a 1 x 4 x 12 was \$1.60.
  - c) I just used 2' long stakes that i got a Lowes to secure them in the ground; Lowes sells them in packets of 24; they didn't appear to be treated. So far, after two years they are holding up fine.
  - d) If I were to do it again, I might consider a 1" x 5" x

### **Growing Tasks**

- 1) Give Lynn nicotiana seeds, arrange with Michael to give her a few J. artichokes
- 2) Send Ken nigella seeds, with picture and instructions; globe thistle seeds already stratified?
- 3) Onions:
  - a) Onions. follow Bargyla's suggestions p. 192: create well-drained and fertile soil (peat, sand, potassium, bone meal (phosphorus), drench with liquid seaweed. Pay attention to harvesting.
     Harvest when tops start to fall over on half of crop. If leave in field too long, spears rot at neck!
  - b) Mulch onions, side dress, water uniformly.
- 4) Replace female Leikora with new shrubs, double-digging bed first, adding root barrier between these two and male.
- 5) In spring, prior to planting cover crop, extend winter bed 1.5' to the west so we can access vent from the south.
- 6) Following "Solanine" file,
  - a) grow fewer white potatoes, peppers, tomatoes and more sweet potatoes, parsnips
  - b) eat salad at end of the meal (vit K), and in kale-potato soup, the vit K in kale counteracts the solanines in potato.
- 7) Horseradish (6b), 3 years. Use one of the galvanized boxes? Can fit 4 roots in it. May be enough.
- 8) NO SULFUR on Irish potatoes, beans, tomatillos! See if this helps.
- 9) Save lovage seed! Serves as celery seed substitute (Markham)
- 10) Add boron to fruit tree and bush beds, including strawberries.

# **GARDEN ORDERS: 2012**

FEDCO (must be in numeric order categorized by seeds, tubers, supplies):

backorder

Mailed Dec. 29, 2011 Rec'd: 1/18/12

SE	SEEDS: Items 1-6899							
	Cat #	Size	Desc	Cost total				
1	292RS	A	Rattlesnake pole beans	1.40				
2	556TX	A(2)	Tuxedo (1 year old seed!)	5.20				
3	842MM	A (3)	Mammoth Melting (1 packet	4.50				
			Fedco peas, snap or snow,					
			contains 150 peas; need 525 for					
			1.75 flats, so require 4 packets)					
4	2182DD	A	Detroit Red Beets	0.80				
8	2472CP	A	Copra onions	1.80				
5	3313FO	A	Fiesta Broccoli	2.30				
6	4450BB	A	Mrs. Burns lemon basil	1.20				
7	4684ST	В	Stevia	5.50				
			Total:	22.70				
			Small order charge:	5.00				
			Shipping:	0				
				27.70				
			Donation, Center for Food	10.00				
			Safety					
				37.70				

Sent Dec 29, 2011 Rec'd: Jan 19, 2012

FEI	FEDCO SUPPLIES: 8001-9999			Cost total
1	8212	10#	Fava /Bell beans	22.50
2	8232	10#	Hairy vetch	55.00
3	8402		Garden combo legume inoc	6.00
4	8405		Vetch inoculant	5.25
5	8865	2#	Safer Garden Fungicide	22.00
6	9083	2#	2 balls hemp twine	11.00
			Total:	121.75
		24#	Shipping:	19.00
			Total:	140.75
<b>'13</b>	9071	1#	Trellis Plus 5, x 30'	12.00

Spray schedule for fruit trees, shrubs, updated February 2012<sup>1</sup>

When	Crop	Use	Procedure	Targe	t Dates
Late winter	All fruit trees except apricots (copper), & fruit shrubs, esp gooseberries	(Lime) sulfur	all fruit trees; grapes (black rot); pears, juneberries and hawthorn (fireblight); peaches (brown rot). Using Bordeaux/copper requires 5-12 sprayings for pear fireblight – see file=garden/pear fire blight. See files on peach rot, which also cover plums, cherries.	March	
	Grapes	copper For powdery mildew sulfur For black rot		March	
	lilacs, damask rose, hawthorn Peas	Copper/ sulfur Vit C	For powdery mildew at bud stage. Copper for fireblight on hawthorn  Dissolve 88 mg vit C (1/25 <sup>th</sup> of ½ t) in 1L water;	March 3/30	
	1 cas	VIC	soak peas <1 hr. Try adding vit C to dissolved kelp to boost further. Hort Ideas Jun 07 1/	3/30	
Spring	Apple, pear	copper	Use against scab in late bud stage (1/2" green),	4/1+	
	Apple, pear (+ other fruit trees if damaged)	pyola	Against aphids, mites, leafrollers (1/2-3/4" green + after petal fall); spray cherries for cherry fruit fly	4/7 4/23 5/12	4/15 5/2
	Peaches, plums, cherries, pears	(lime) sulfur	Spray during peak blossom. For brown rot on peaches, plums, cherries; scab, pm (pears, apples)	4/7+	
	peas-aschotya blight	Serenade	Sprayed w. strawberries. 1 gal mix does both. Every 7-10 days. Spray strawberries first, then add Murphy's for peas.	5/22 6/10	5/29 6/20
	Strawberry grey mold	Serenade, copper soap	Pick daily, use fan to promote air circulation, compost from lower pile. First grey mold 5/19/10. Apply 7-10 day intervals	5/16 6/7	5/26
Late spring, summer	lilacs, red mon- arda, peonies, swt pea, rose, lungwort, lysi- machia, Bali cherry, squash, zinnias	Against p. mildew	Palmolive detergent sodium bicarbonate! Used lt/gallon soap, with 2t/gal baking soda. Every two weeks, starting mid-June! Must keep it up.	6/11 7/10 8/7 9/4	6/26 7/24 8/21
	Tomato seeds	antioxidant	Seedling shoot dry mass production relative to that of untreated controls was increased by 56% after soaking the seeds (24 hrs at 77 F) in a solution of 1.0 milligram of ascorbic acid per liter of water; by 83% with 0.1 milligram of lycopene per liter; and by 94% with 1.0 milligram of lutein per liter. Use small amount of alcohol to dissolve lycopene, lutein. Hort Ideas Nov 09. Can use beta carotene, too.		
	Gooseberries	Pyola, hort oil	Monitor currant sawfly larvae! Sprayed 5/28, and then 3-4 days later! Spray weekly thereafter.	5/28 6/9	6/2 6/16

1 Check out this site for disease prevention:
http://www.ghorganics.com/page15.html#Hydrogen%20Peroxide%20Treatment



