

HERD EXPANSION CALCULATOR

Farmer : Organic Transition

Plans No.:

HERD DATA:

	Future**	Now	No. of Head			
			Now	Future**	Now	Future**
Cows at beginning of year	60					
Heifers 0-12 mo. at beginning of year						
Heifers >12 mo. at beginning of year						
Involuntary cull rate (% including dead & downers)	28.0	38.0				
Calving interval		14.0				
Age at first calving		24.0				
% of cows present 1/1 that will deliver a live calf by 12/31		95.0				
% of replacement heifers that will deliver a live calf		94.0				
% calf mortality (exclude abortions, stillbirths, etc.)		8.0				
% of calves born that are heifers		50.0				
% of excess heifer calves sold for dairy						
Check when purch. cattle enter milking herd:	(Jan-Dec <u>x</u>)	(Jan-Apr <u> </u>)	(May-Aug <u> </u>)	(Sep-Dec <u> </u>)		

	Value	No. of Head
Cattle Sold for Breeding		
Dairy cow	2200	
Dairy calf		
Dairy heifer	2200	
Dairy bull		
Cull and Veal Sales:		
Cull & dead cow av	500	
Cull yearling	450	
Cull calf	100	
Replacement Cost:	2400	

****NOTE:** "Future" is the years after desired herd size has been reached.

RESULTS by Yrs. (Enter current yr.):

	2008	2009	2010	2011	2012	2013	2014	2015
* Cows in place at beginning of year		60	60	60	56	57	60	60
Cattle purchases - no. cows	60							
- no. late-bred heifers	9	16	8					
Raised heifers - no. calved			10	19	24	28	28	20
Breeder sales - no. cows								
- no. heifers								
Cows culled - total number	9	16	18	23	23	24	20	18
* No. of cows at end of year	60	60	60	56	57	60	60	60
Excess cows/fresh heifers (sold for 2x cull value)		0				1	8	3
* Avg herd size (milking & dry cows fed / yr.)		56	58	58	57	59	60	60
Cows Milking	51	51	51	48	49	51	51	51
No. of heifer calves born and survived per year:								
From cows in herd at beginning of year		22	22	22	21	22	22	22
From raised and purchased replacements	10	3	6	9	11	13	13	9
Total heifer calves born and survived	10	26	29	31	32	34	35	32
* No. of heifers on hand at beginning of year:								
Calves 0-12 mo. old		10	21	27	31	32	23	21
Yearlings >12 mo. old			10	20	25	30	30	22
Total		10	31	47	57	61	53	42
No. heifers needed to reach desired herd size and breeder sales:								
Yearlings needed (1 yr. lead + 10%)	85	19	21	27	31	32	23	21
Excess or shortage of yearlings							7	1
Calves 0-12 mo. old needed (2 yr. lead)	19	21	27	31	32	23	21	20
* Excess or shortage of calves		5	2		0	11	15	12
No. sold for breeding: - calves 0-12 mo.								
- yearlings >12 mo.								
- dairy bulls								
No. heifers culled as - calves 0-12 mo.		5	2		0	11	15	12
- yearlings >12 mo.			1	1	2	2	2	1
* No. of heifers at end of year:								
Calves 0-12 mo. old	10	21	27	31	32	23	21	20
Yearlings >12 mo. old		10	20	25	30	30	22	20
Total	10	31	47	57	61	53	42	40
* Avg. no. of heifers on feed	5	21	39	52	59	57	48	41
* Cattle sales:								
Culled cattle:	5572	10938	12220	15061	15253	17566	15805	13817
Breeding stock:		120				931	8181	2513
Total sales	5572	11057	12220	15061	15253	18497	23986	16329
* Cattle purchases (total = \$223200)	165600	38400	19200					

Total Cattle Purchases

RESULTS by Year (continued):

	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Cows culled from								
- begin-of-year cows		23	17	23	21	22	17	17
- purchased cows	8							
- purchased yearlings	2	3	1					
- fresh expans'n heif'rs					0	1		
- all other fresh heifers		-10			1	2	3	1
<u>Total cows culled</u>	<u>9</u>	<u>16</u>	<u>18</u>	<u>23</u>	<u>23</u>	<u>24</u>	<u>20</u>	<u>18</u>
Heifer calves born and survived from raised and purchased replacements:								
From raised heifers			4	9	11	13	13	9
From purchased cows	9							
From purchased heifers	2	3	2					
<u>Total heifers born and survived</u>	<u>10</u>	<u>3</u>	<u>6</u>	<u>9</u>	<u>11</u>	<u>13</u>	<u>13</u>	<u>9</u>
No. heifers needed to reach desired herd size and breeder sales:								
To expand (goal - cows at begin of year)	63.8	0.1		0.0	4.1	2.7		
Breeder sales								
- no. of cows								
- no. of heifers								
Total cows culled	9.1	15.8	17.8	22.8	22.6	24.5	20.0	17.8
Yearlings needed (1 yr. lead + 10%)	85.3	18.6	20.8	26.7	31.3	31.7	23.4	20.8
Excess or shortage of yearlings							6.6	0.8
Calves 0-12 mo. old needed (2 yr. lead)	18.6	20.8	26.7	31.3	31.7	23.4	20.8	20.2
Excess or shortage of calves		4.7	1.8		0.3	11.0	14.6	11.6
Cattle sales and purchases:								
Culled cattle:								
- cows	4532	7909	8904	11395	11325	12230	9991	8889
- yearlings >12 mo.			281	546	688	801	809	583
- heif calves 0-12 mo.		472	183		33	1099	1463	1164
- bull calves	1040	2556	2853	3120	3207	3437	3543	3181
<u>Sub total</u>	<u>5572</u>	<u>10938</u>	<u>12220</u>	<u>15061</u>	<u>15253</u>	<u>17566</u>	<u>15805</u>	<u>13817</u>
Breeding stock:								
- cows		120				931	8181	2513
- yearlings >12 mo.								
- calves 0-12 mo.								
- bull calves								
<u>Sub total</u>	<u></u>	<u>120</u>	<u></u>	<u></u>	<u></u>	<u>931</u>	<u>8181</u>	<u>2513</u>
<u>Total cattle sales</u>	<u>5572</u>	<u>11057</u>	<u>12220</u>	<u>15061</u>	<u>15253</u>	<u>18497</u>	<u>23986</u>	<u>16329</u>
Cattle purchases	165600	38400	19200					