

Health with Grit and Determination

Huber Crops and Chops

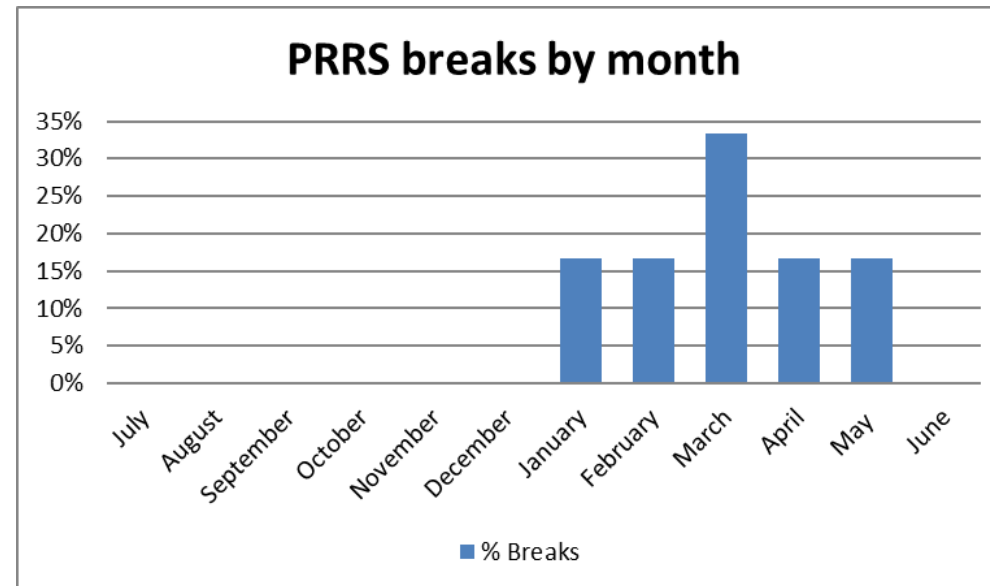
- Washington County, IA
- Farrow to Finish
 - Pigs sourced from 2 sow farms
- Central College – Pella, IA
- Laura, Alexa - 18, and Callie - 16
- Environmental Stewards by IPPA in 2015
- Iowa Farm Environmental Leader Award in 2014
- IPPA Master Pork Award - 2023



Sow Farm History

Farm Start up – November 2005

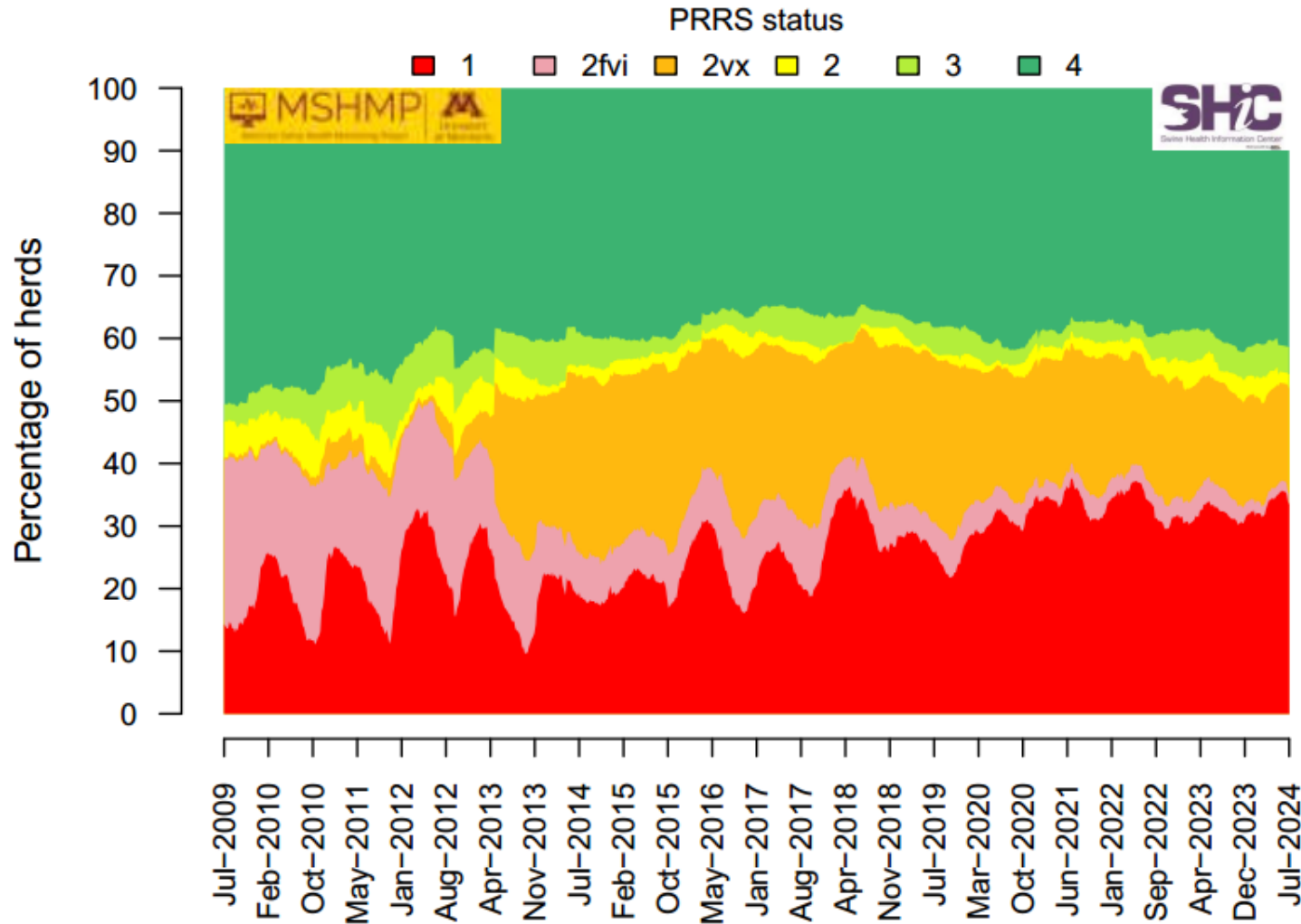
- 175 total months
- 6 PRRS introductions
- Break rate 29 months (2.4 years)



Break	Survival (months)
2/7/2006	3
3/4/2011	61
5/1/2014	38
3/10/2017	34
1/22/2019	22
4/21/2020	15

PRRS is Changing

Chart 2 – PRRS prevalence of sow herd status as of July 24, 2024



- Persistence
 - ~60 weeks
- High viremia
- Epidemic Duration
 - Prior 2014 – 20 weeks
 - After 2014 – 34 weeks

Gritty Decisions

- Filtration Decisions:
 - Seasonal Filtration vs All Season Filtration Filtered
 - Positive Pressure vs Negative Pressure
- Farm Owner Decisions:
 - Confidence it can work
 - ROI discussions
 - Capitalizing the project
 - Depop/Repop – Yes/No?
 - On site vs off site

Cost of Project - Estimates

Negative Pressure Seasonal

- ~\$250/sow = \$1.6M
- High labor, inspections, maintenance
- Seasonal filtration
- Annual cost \$1.25/pig = \$200,000

Positive Pressure

- \$1,000-\$1,200/sow = \$6.5M
- Secure, low labor
- All year filtration
- Annual cost \$0.75/pig = \$125,000

Negative Pressure Full Season (2021)

Project	Cost
Building Extensions	\$1.451k
New Ventilation	\$668k
Filters/Grids	\$558k
Spray Foam	\$281k
New Controllers	\$140k
Replace roof metal	\$413k
New loadout	\$52k

Negative Full Season

\$3.6M
\$560/sow

Before



After



Timeline

Phase	Time	Duration
Stop Breeding	3/25	
GDU empty	3/29	
G1 empty	5/31	
G2 empty	7/19	
Concrete	3/25 – 5/11	6 weeks
Framing	3/29 – 6/23	11 weeks
Spray Foam	4/1 – 6/8	9 weeks
Ventilation equipment	4/20 – 6/23	8 weeks
Electric	4/27 – 8/2	9 weeks
Complete	8/2	17 weeks

Other Considerations

- Manure pumpout
- Pit fans
- Connecting hallways
- Dead drop
- Supply entry
- Offices (Iso, main)
- Lighting
- Ventilation equipment
 - Fan performance
 - Alarming controller
- Rodent Control









↓ GDU – Filter Dormers – Filter wall not installed:



↓ Filter Grid / Filter wall installation – North Gestation Barn 1:













↓ North GDU barn – removing emergency curtains and sealing side walls.



↓ GDU Barn: Interior wall remodel – aluma plywood with silicone on all joints.



↓ Farrowing building fan dormers:









Depop/Repop - Timeline

<u>Timeline</u>	<u>Week</u>	<u>Date</u>	<u>1000 Day</u>	<u>Day</u>	<u>Owner</u>	
Increase breed target week 9, 10, 11	9, 10, 11				Production	
Begin HNS at breeding project	12	3/22/2021	74	Monday	Production	
Last EGP breed day (day 075 = 115 + 12 days)	12	3/23/2021	75	Tuesday	Production	
Last EGP breeds + 11 days	13	4/3/2021	86	Saturday	Production	Safety margin
Begin Breeding at breeding project	15	4/16/2021	99	Friday	Production	
Wean down farrowing (12 DOA through 23 DOA)	30	7/28/2021	202	Wednesday	Production	Bred 064 - 075
Transfer heavy bred gilts to EGP	31	8/6/2021	211	Friday	Production	
Farrow first gilts (day 115 of gestation)	32	8/9/2021	214	Monday	Production	
First Wean	35	9/1/2021	237	Wednesday	Production	

No wean pigs from 7/28 through 9/1 – 35 days

11,000 pigs x \$38 = \$420,000 = \$65/sow = 1.7 PSY

Wean pigs/week	3,200
Pigs/day	457
Days with no wean pig	35
Wean down, extra pigs	11
Total days with no wean pigs	24
Total pigs that need to be purchased	10971

Cull Sows – March 17, 2021

Negotiated Sows (Live Basis)	National (LM_HG230)	Iowa/Minnesota (LM_HG231)	Western Cornbelt (LM_HG233)	Eastern Cornbelt (LM_HG232)
300-399 pounds				
Price Range	63.00 - 89.00	63.00 - 89.00	63.00 - 89.00	63.00 - 84.50
Wtd Average Price	76.07	76.86	76.13	73.09
Average Weight	365	362	365	364
Head Count	2,201	1,549	1,902	178
400-449 pounds				
Price Range	63.00 - 89.00	65.00 - 89.00	65.00 - 89.00	65.00 - 84.50
Wtd Average Price	76.40	77.00	76.37	76.75
Average Weight	424	424	423	422
Head Count	1,368	707	929	144
450-499 pounds				
Price Range	64.00 - 88.50	64.00 - 88.50	64.00 - 88.50	75.00 - 86.66
Wtd Average Price	82.32	80.06	80.21	84.71
Average Weight	474	473	474	475
Head Count	2,052	483	687	1,056
500-549 pounds				
Price Range	72.38 - 92.00	73.45 - 92.00	72.38 - 92.00	80.00 - 90.00
Wtd Average Price	83.15	82.48	82.59	84.57
Average Weight	523	523	523	521
Head Count	1,264	346	471	561
550/up pounds				
Price Range	79.00 - 92.00	79.00 - 92.00	79.00 - 92.00	* *
Wtd Average Price	83.62	83.82	84.00	*
Average Weight	586	591	588	590
Head Count	718	268	333	47
Total Live Basis Head Count	7,603	3,353	4,322	1,986

Cull Sow Contracting

Forward Pricing Sows						3/16/2021
Month	400 dn	400-450	450-500	500-550	550-600	600 up
May	76.50	77.50	81.00	83.50	85.00	85.00
June	67.50	68.50	72.00	74.50	76.00	76.00
July	61.50	62.50	66.00	68.50	70.00	70.00
Aug	62.50	63.50	67.00	69.50	71.00	71.00
Sep	59.50	60.50	64.00	66.50	68.00	68.00
Oct	50.50	51.50	55.00	57.50	59.00	59.00
Nov	46.50	47.50	51.00	53.50	55.00	55.00
Dec	42.50	43.50	47.00	49.50	51.00	51.00
Jan	39.50	40.50	44.00	46.50	48.00	48.00
Feb	43.50	44.50	48.00	50.50	52.00	52.00
Mar	44.50	45.50	49.00	51.50	53.00	53.00
Apr	42.50	43.50	47.00	49.50	51.00	51.00

April 3 – last breed
 July 28 – wean down

April – 1,600
 May – 1,600
 June – 1,600
 July – 1,600



Budget

Filtration Cost Analysis

Current Break Rate	2.4	Years
Break Cost \$/ sow	\$125	
Herd Size	6,400	
PRRS Cost/Year	\$333,333	

Cost of Filtration

Type	Cost/Sow	Total
Negative	\$560	\$3,584,000
Positive	\$1,000	\$6,400,000

	Prefilters	HEPA
ISO	92	92
GDU	214	214
BG 1	1,193	1,193
BG 2	1,193	1,193
Farrow	1,193	1,193
Total Filters	3,885	3,885
Cost per	\$4.63	\$94.00 (purchase, install, dispose)
Replacement Cost	\$18,000	\$365,190

Replacement Frequency	0.5	5 In Years
Annual Cost	\$36,000	\$73,038

Added Debt Service

Filtration	Negative
Filtration Cost	\$3,584,000
Depop/Repop Cost	\$1,059,193
% Borrowed	100%
Loan Term	10
Int Rate	4.0%
Residual Value % 10 yrs	60%
Annual Pmt	\$564,121

Future Break Rate	6	Years
Break Cost \$/ sow	\$125	
PRRS Cost/Year	\$133,333	
Annual Filter Maintenance Cost	\$109,038	
Debt Service	\$564,121	

Projected Annual Cost \$806,492

Current PRRS cost/year \$333,333

Net Cost per year - Filtered (\$473,159)

Cash Flow Effect \$673,159

Wean pig Cost \$ 4.38

24 PSY

[2021-01-09 EGP Depop Scenarios.xlsx](#)

Budget

Projected Annual Cost	\$806,492
Current PRRS cost/year	\$333,333
Net Cost per year - Filtered	(\$473,159)
Cash Flow Effect	\$673,159
Wean pig Cost \$	4.38
	24 PSY

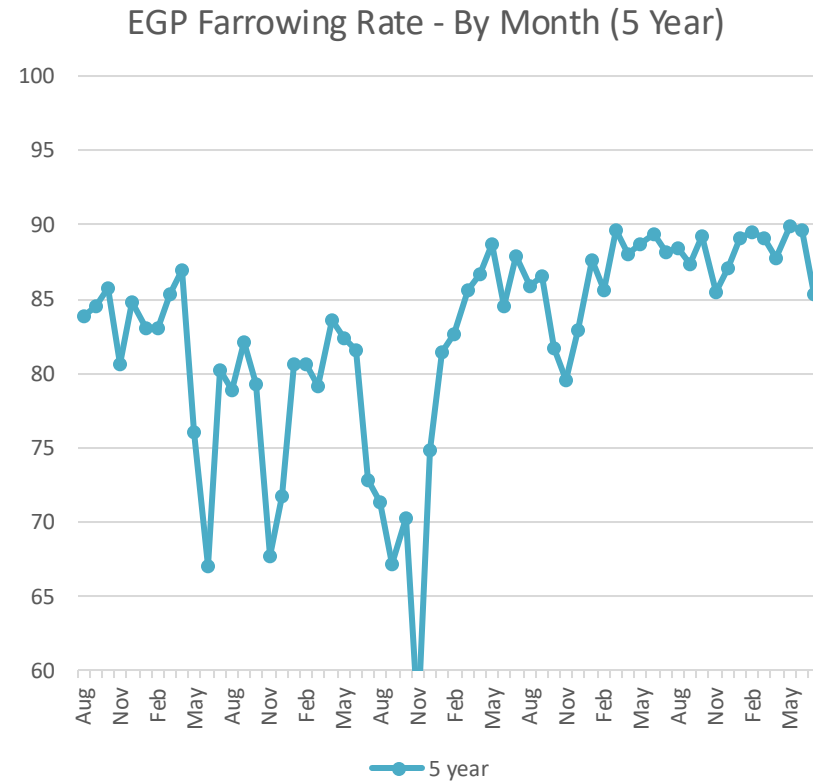
Sensitivity Table - Each Example is Exclusive of the other

PSY	24		Baseline	24	PSY
Current Break Rate	2.4	Years	Revenue	\$36	Per Head

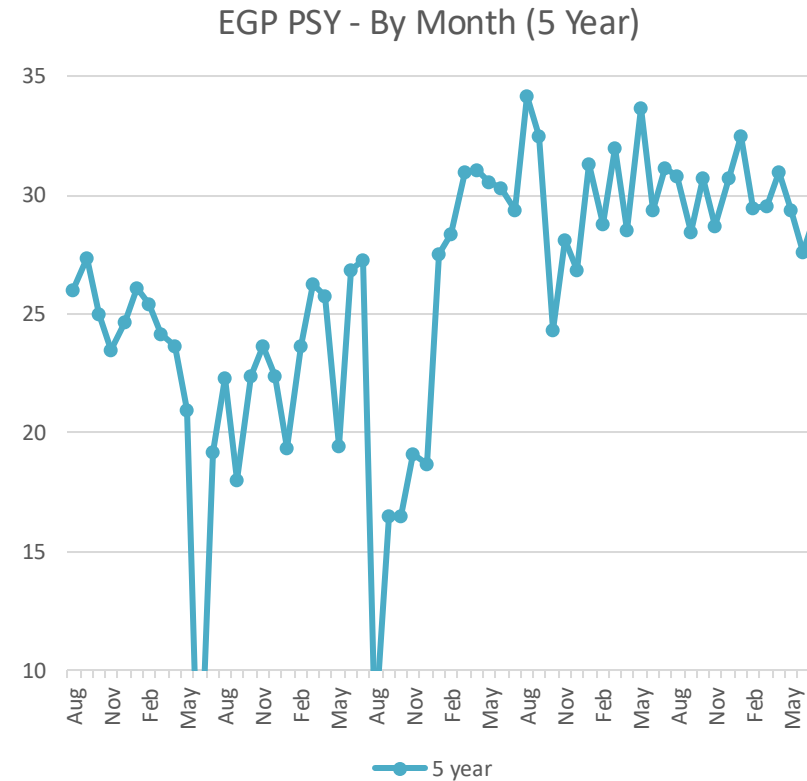
	W-F Perf Adv	Break Cost	Annual Cost	PSY	Annual Value	Per Head
\$/ hd	\$ 1.00	\$ (153,600)	\$ (64,000.00)	0.5	\$ 115,200	\$ 0.73
	\$ 2.00	\$ (307,200)	\$(128,000.00)	1.0	\$ 230,400	\$ 1.44
	\$ 3.00	\$ (460,800)	\$(192,000.00)	1.5	\$ 345,600	\$ 2.12
	\$ 4.00	\$ (614,400)	\$(256,000.00)	2.0	\$ 460,800	\$ 2.77
	\$ 5.00	\$ (768,000)	\$(320,000.00)	2.5	\$ 576,000	\$ 3.40
	\$ 6.00	\$ (921,600)	\$(384,000.00)	3.0	\$ 691,200	\$ 4.00
	\$ 7.00	\$(1,075,200)	\$(448,000.00)	3.5	\$ 806,400	\$ 4.58
	\$ 8.00	\$(1,228,800)	\$(512,000.00)	4.0	\$ 921,600	\$ 5.14
	\$ 9.00	\$(1,382,400)	\$(576,000.00)	4.5	\$ 1,036,800	\$ 5.68
				5.0	\$ 1,152,000	\$ 6.21
				5.5	\$ 1,267,200	\$ 6.71
				6.0	\$ 1,382,400	\$ 7.20

Production Trends

Farrowing Rate



PSY



In Conclusion

Advantage

- Reduce PRRS break rate
- Depop/Repop
- Cull Contracted Prices
- Lower Interest Rates
- Improved Throughput
- Upgrade in facility

Disadvantage

- Additional Debt
- Offsite Breeding Project
- 5 weeks no pigs
- Production Gymnastics