

# MARIA STEIN ANIMAL CLINIC, INC.

## June 2018

### Maria Stein Office

8155 St. Rt. 119  
 Maria Stein, OH 45860  
 419-925-4212 (pets)  
 419-925-4212 (farm animal)  
 419-925-7200 (fax)

*Michelle M. Michalak, DVM*  
*Mark E. Hardesty, DVM MS*  
*Brandy A. Liles, DVM*

### Heartland Veterinary Care

315 East Main St.  
 Versailles, OH 45380  
 937-526-5599

[msac@bright.net](mailto:msac@bright.net) (Pig & Pets)

*Laura A. Nusbaum, DVM*  
*Angela M. King, DVM*  
*Andrew H. Lefeld, DVM*

### Heartland Animal Clinic

1018 B West Auglaize St.  
 Wapakoneta, OH 45895  
 419-738-7257

[hvcow@bright.net](mailto:hvcow@bright.net) (Cattle)

### Minster Veterinary Services

29 South Main St.  
 Minster, OH 45865  
 419-628-3532

*Emily L. Stayduhar, DVM*  
*Paul J. Hunter, DVM*  
*Thomas M. Cully, DVM*

**Dr. Cully Joins our Practice** Tom Cully was one of those student interns that we were very impressed with, but timing didn't work out for him to join our team, until now. Dr. Cully graduated from Lincolnview High School, received his Bachelor's of Science from Indiana Wesleyan University and his DVM from Cornell in 2014. He has been herd veterinarian and dairy manager on a large dairy in Wisconsin since graduation.

As herd veterinarian, Dr. Cully practiced clinical medicine, trained animal health employees, monitored animal health and performance, and created animal health standard operating procedures. As dairy manager, Dr. Tom reviewed company financial records, served in human resource and public relations capacities, coordinated company projects, and analyzed employee performance. He will bring that experience to our dairies as running a dairy becomes more complex.

When asked, "How do you learn from others outside of your farm?" Dr. Cully responded: I love attending local, regional, and national meetings to glean from other's experience and expertise. I have always enjoyed school and learning is part of who I am. I also like talking to local contacts about dairy news in our region. I regularly peruse several industry publications, scientific publications, and professional publications.

Dr. Cully and his wife Olivia have three children, Ruth 4, Abraham 2, and Judah 5 months. When asked "What do you like to do outside of work?" Dr. Tom responded: I love spending time with my family. I have an amazing wife and three wonderful kids. We spend time playing, reading, romping, eating, and growing together. I also like to spend one-on-one time with my wife and each

of my kids. Our family has been quite involved in our church and I like to spend time involved in the community serving, building relationships, and learning. Also, I like to spend time working around the home gardening, lawn/yard care, DIY home improvement projects, and vehicle maintenance. I enjoy, but don't get to participate much, in outdoor activities like hiking, hunting, fishing, and motorsports. I play basketball on a regular basis and would accept an invitation to play professionally if offered!

Dr. Cully will advance though our usual training rather quickly to fill slots in our herdcheck and on call schedule. Please welcome him and his family to our practice and back to the area. We think that Dr. Cully has made housing arrangements, but if you know of a house for rent, please let us know.

**Genomics – an investment in lowering costs of production** Management and nutrition have gotten good enough on most farms that the next limiting factor is the quality of cattle that we put inputs into. Genomic testing looks like an expense we can't afford, but we are still buying feed. Is that feed going into the most productive animal? How many animals do you need?

### Future Replacement Inventory Projections:

Using herd records, enter values in white cells.

#### A. HEIFERS

DOA for LACT=1 Rate	5.0%
Cull Rate	6.0%
# Yearling Heifers	220
% Female Calves	49%
Ave Age at 1st Calving (Mo)	23
Purchased Replacements?	0

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### C. PROJECTED INVENTORY

# Projected Heifers 1Yr

236

# Heifers Deficit/Surplus 1Yr

76

### B. ADULT HERD

# ADULTS	500
Avg DOPN	110
Cull Rate	32.0%
DOA for LACT>1	4.0%
% Female Calves	44%
Additional Cows?	0

### D. PROJECTED NEEDS

# Heifer Replacements  
Needed

160

Once we know how many heifers we need, we can reduce extra expense and invest more in the best. We can run this calculator for you with your numbers. This gives you a tool to more easily manage your dairy. Don't feed animals that don't pay you back.

### The Importance of Daughter Pregnancy Rate

Daughter Pregnancy Rate (DPR) is the percent of cows eligible to become pregnant in a 21-day period that actually become pregnant. For each 1% unit increase in DPR, approximately four fewer days open are expected. DPR is one type of PTA (predicted transmitting ability). DPR is considered

a low fertility trait, but we have seen dramatic improvement using DPR selection with our fertility first service and resynch programs.

By increasing DPR, the following also happens: conception rate (CR) increases, pregnancy rate (PR) increases, and services per conception (SPC) decrease. Our new Zoetis technical services veterinarian, Dr. Flavio Silvestre, shared the following data:

	CR	PR	SPC
DPR <0	32	19	3.1
0-1	39	24	2.5
>1	45	30	2.2
<b>Overall</b>	<b>36</b>	<b>22</b>	<b>2.8</b>

DPR is a tool to increase the reproductive performance of your herd. Choosing bulls with higher DPR also increases his daughters' DPR. The heritability of DPR is 0.04 or 4%.

One of our clients sent the following from their herd records:

DPR	PR
<0	28%
0-2.2	32%
>2.2	38%

On the other hand, as milk goes up, DPR goes down. Low milkers tend to have high DPR. In order to maximize milk production and reproduction, Dr. Silvestre recommends choosing a 1,500 lb. bull with a 2.0 DPR.

We know that by focusing too much on just milk production, we let other traits slide to the detriment of the cow. These traits can include health traits and reproduction. DPR can help improve reproductive performance.