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2018 ADSA Notable Reports 1

M155 Silage safety: Preventing serious injury and fatality accidents involving machinery. *K. K. Bolsen*1 and R. R. Bolsen2, 1Kansas State University, Manhattan, KS, 2Keith Bolsen Silage Safety Foundation, Austin, TX.*

- Few farming operations invite as many opportunities for a serious injury or fatality a silage program.
- Three hazards in managing bunker silos and silage piles are truck or tractor rollover, entanglement in machinery, and runover by machinery.
- These hazards can lead to tragic deaths as described by the case studies presented.
- Every beef and dairy cattle producer should have written safety guidelines for their silage program and schedule regular meetings with all employees to discuss safety.

M157 Survey of top-producing Jersey herds in the United States. *S. Y. Morrison*1, K. M. Glosson1, J. H. Baltz1, M. F. Hutjens1, and C. W. Wolfe2, 1University of Illinois, Urbana, IL, 2American Jersey Cattle Association, Reynoldsburg, OH.*

- A survey of current practices of feeding and management on high producing Jersey farms in the United States was conducted to gather Jersey-specific information.

- The top producing U.S. Jersey herds were surveyed about herd management practices including (1) level of production; (2) use of recombinant (r)bST; (3) herd size; and (4) breed composition of the herd.

- Larger herds with more than 200 cows had similar production to smaller herds, but tended to milk more and push up feed more frequently.

- Herds that included Jersey and other breeds tended to have lower SCC, more frequent milkings per day, higher percentage of weigh backs, and significantly less ketosis.

M209 Use of 3-dimensional camera to predict body weight in pre-weaned dairy calves. *J. R. R. Dorea*, A. F. A. Fernandes, V. C. Ferreira, A. Cominotte, D. K. Combs, and G. J. M. Rosa, University of Wisconsin-Madison, Madison, WI.*

- Results indicate that analyzing images from a 3D camera can be used as a potential tool for real-time prediction of body weight in pre-weaned calves.

- Monitoring calf growth development in commercial herds can be used to anticipate potential health problems, and hence guide preventive management practices.

M213 Use of a stochastic simulation model to estimate digital dermatitis, sole ulcer, and white line disease cost per case by severity, incidence timing, and parity group in dairy cattle. *K. A. Dolecheck*1, M. W. Overton2, T. B. Mark1, and J. M. Bewley3, 1University of Kentucky, Lexington, KY, 2Elanco Animal Health, Greenfield, IN, 3CowFocused Housing, Bardstown, KY.*

- A model was used to study the costs of 3 hoof diseases to help improve on-farm decisions about treatment and prevention.

- Costs per case were: digital dermatitis (average of $137), white line disease (average of $203), and sole ulcers (average of $252).

- The greatest contributors to costs of the diseases were decreased milk production, increased risk of culling, disease recurrence, and, in severe cases, increased risk of death.

M214 A survey of United States dairy hoof care professionals on costs associated with treatment of hoof diseases. *K. A. Dolecheck*1, R. M. Dwyer1, M. W. Overton2, and J. M. Bewley3, 1University of Kentucky, Lexington, KY, 2Elanco Animal Health, Greenfield, IN, 3CowFocused Housing, Bardstown, KY.*

- Hoof trimmers were surveyed about 6 hoof diseases.
- Treatment cost per case were reported as toe ulcers ($20), sole ulcers ($20), white line disease ($20), thin soles ($18), and foot rot and digital dermatitis ($8 each).
- Digital dermatitis was treated most frequently (average of 44%). These hoof trimmers reported a lower prevalence of digital dermatitis and a higher prevalence of sole ulcers in herds with more than 500 cows as opposed to small herds.
- More sole ulcers were reported in the Northeast than in Other regions.

M222 Association between hoof lesions and fertility of dairy cows. *B. O. Omontese*1, R. Bellet-Elias1, A. Molinero1, G. D. Catandi1, R. Casagrande1, Z. Rodriguez1, R. S. Bisinotto2, and G. Cramer1, 1Department of Veterinary Population Medicine, University of Minnesota, St. Paul, MN, 2Department of Large Animal Clinical Sciences, University of Florida, Gainesville, FL.*

- For this study in Jersey cows, cows with hoof lesions at 20 DIM were less likely to cycle and become pregnant.
- No association between cyclicality and reproductive performance was found for cows with hoof lesions that developed after the examination at 20 DIM.

58 Identification of genomic regions associated with resistance to clinical mastitis in US Holstein cattle. *J. B. Cole*1, K. L. P. Gaddis2, C. Willard1, D. J. Null1, C. Maltecca3, and J. S. Clay4, 1Animal Genomics and Improvement Laboratory, ARS, USDA, Beltsville, MD, 2Council on Dairy Cattle Breeding, Bowie, MD, 3Department of Animal Science, College of Agriculture and Life Sciences, North Carolina State University, Raleigh, NC, 4Dairy Records Management Systems, Raleigh, NC.*

- Using genotypes and producer reported data, genes associated with resistance to clinical mastitis in US Holstein cattle included those involved in the development and defense of the mammary gland, and possibly associated with changes in milk composition in response to infections of the udder.

- Additional work will study whether these genes represent true causal mechanisms.