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T44 Texas dairy industry assessment of research, education, and service importance of the Southwest Regional Dairy Center. B. W. Jones*, 1, 2 Tarleton State University, Stephenville, TX, 3 Texas A&M AgriLife Research, Stephenville, TX.

The Southwest Regional Dairy Center (SWRDC) is the Texas A&M University system wide dairy located in Stephenville, TX, and is administratively managed through Tarleton State University. The SWRDC opened its doors in 2011 and its mission is to provide enabling infrastructure support for teaching, research, and service/outreach programs to meet the needs of higher education, the dairy industry, and society in Texas and the southwest. The objective of this research was to determine future directions the SWRDC should take and what the SWRDC could improve upon. In October 2019, a Qualtrics survey (Qualtrics LLC., Provo, Utah) was distributed to the Texas Association of Dairymen and extension agents to further distribute to dairy producers and industry representatives. The survey asked respondents to rank satisfaction with tours of the SWRDC from 1 to 7 (1 = extremely satisfied, 7 = extremely dissatisfied) and to rank community outreach events, research activities, extension events, and types of research from least important to most important. Twenty-eight producers and dairy industry representatives responded. Statistical analyses were completed on the survey responses using SAS (Version 9.4, SAS Institute, Inc., Cary, NC). The MEANS procedure calculated satisfaction with tours. The FREQ procedure was used to determine the highest ranked response for community outreach events, research activities, extension events, and types of research that should be conducted. On average respondents were extremely satisfied with tours of the SWRDC (1.77 ± 1.30; respondent range was 1 to 4). The respondents’ highest ranked community outreach event, research activity, extension event, and type of research were, breakfast on the farm, research showcase, demonstration days with continuing education credits offered, and ruminate nutrition, respectively. Survey findings were informative and help inform the SWRDC administration of future directions the center should take in research, education, and service activities.

Key Words: extension, education, service

T45 Wisconsin farmer-reported housing and milk-feeding practices for preweaned dairy calves. J. Van Os*, 1, C. Winder, 2, M. Akins, 3 T. Kohlman, 1 T. Ollivett, 1 H. Schlesser, 1 B. Schley, 1 S. Stuttgen, 1 and J. Versweyveld, 1 Department of Dairy Science, University of Wisconsin-Madison, Madison, WI, 2 Department of Population Medicine, University of Guelph, Guelph, ON, Canada, 3 Division of Extension, University of Wisconsin-Madison, Madison, WI, 4 School of Veterinary Medicine, University of Wisconsin-Madison, Madison, WI.

Research has indicated many benefits of socially rearing pre-weaned calves, but little is known about current industry practices. Our objective was to characterize calf-rearing practices in WI. A Qualtrics survey was distributed to dairy farmers and calf raisers. On average, WI respondents (n=202) had 103 milk-fed calves and 469 milking cows. Most farms (164, 81%) housed calves only individually, although 38 (19%) housed some heifers socially. Of farms using social housing, 23 (61%) kept calves in the same group, 15 (39%) had a two year age range within groups was <1 wk (18 farms, 47%), with most calves entering groups at ≤14 d old (24 farms, 63%). Most farms with social housing (74%) fed milk or replacer through a teat (bottle, teat bucket, or automatic feeder) for most of the milk-feeding stage, but only 24% of farms with only individual housing fed through a teat. Four-week old calves were fed milk or replacer at a volume of 6.9 ± 2.4 vs. 7.4 ± 2.3 L/d (mean ± SD) on farms housing their calves only individually vs. using social groups, respectively (>97% response rate). In rating the level of satisfaction with their calves’ growth performance, 87 vs. 86% of those using only individual vs. some social housing indicated they were somewhat or extremely satisfied (>97% response rate). In rating the level of satisfaction with their calves’ health, 84 vs. 89% of those using only individual vs. some social housing indicated they were somewhat or extremely satisfied (100% response rate). Of the farmers using only individual housing, 64 (39%) indicated they were interested in learning more about social rearing. These results demonstrate that many WI farmers are managing pre-weaned calves in social groups using a range of practices, and with the majority expressing satisfaction with the outcomes. This information can be used to better target future research and extension education programs.

Key Words: survey, welfare, heifers

T46 Use of dairy advisory teams as a tool for improvement. L. A. Holden*, The Pennsylvania State University, University Park, PA.

The complexity of dairy farm businesses mean that owners need to have expertise in many different areas, including crop and dairy production, herd health, workforce, financial and business management. Most dairy producers rely heavily on farm advisors for information, advice and help with problem solving. Sometimes that advice and help can result in conflicting information. Dairy advisory teams are one business tool that allow producers to bring all their advisors together on a regular basis to sort conflicting information and move forward successfully. The objective of this project was to evaluate the impact of dairy advisory teams on farms and the measure the extent of involvement from farm advisors. Written surveys were mailed to 104 dairy producers using teams and 262 farm advisors working with at least 1 of the 104 teams. Response rate was 73 of 104 or 70.2% for dairy producers and 132 or 262 or 50.4% for farm advisors. After the first year of using a team, dairy producers (n=58) indicated that the success rate for areas targeted for improvement was 81.1% for record keeping and use of farm records for decision making, 68.3% for increased milk production and 66% for improved nutrition or reduction in feed costs. Some other targeted areas had less than 60% rate of success. Before the use of a dairy advisory team, only 15.5% of dairy producers felt that regular communication with advisors was important compared with 63.2% after using the team. Farm advisor responses indicated that 64% of their teams had 5 to 6 members, and a majority (61.40%) of advisors spent between 10 and 40 h per year working with a team. When asked about satisfaction with milk production and cash flow, nearly half of the dairy producers were “not satisfied” before team use but less than 10% indicated “not satisfied” after use of the team. Farm advisor satisfaction with communication increased from 23.1% before the team to 82.9% after the use of the team. Well managed dairy advisory teams can be a sound business tool for improving communication among farm advisors and for making positive on-farm changes in targeted areas.

Key Words: team problem solving, dairy management, farm advisors

T47 Evaluation of trainings provided to Central Texas dairy workers. J. A. Garcia Buitrago*, 1 G. R. Hagvoort, 1 J. Spencer, 1 and J. Pineiro, 1 New Mexico State University, Agricultural Science Center at Clovis, Clovis, NM, 2 Texas A&M University, Texas AgriLife Extension, College Station, TX.

A close relationship has been reported between the work performed by workers who have received training in animal handling, animal welfare, reduction of occupational risks and the increase in productivity of dairy farms. Cattle behavior toward people depends on instinctive actions, reactions to external stimuli and acquired conduct, their knowledge through training can help improve job performance. Between 2015 and 2018 New Mexico State University and Texas A&M University dairy extension spe-
cialists conducted animal handling trainings with dairy workers from Central Texas dairy farms with the goal to affect their animal handling skills. Three-hour training sessions conducted in both Spanish and English using audiovisual presentations were followed by live demonstrations with dairy cows. The training included 5 conceptual elements: how do cows perceive their surroundings, blind spots, flight zone, point of balance and moving animals. To determine the level of comprehension of the trainings, 104 participants were asked to answer 10 objective questions about the concepts of animal behavior and handling, in identical tests conducted before and after the training session. The tests were scored according to the number of correct answers, their means were compared using a t-test, and the effects of age, educational level, language and gender of participants and training year were analyzed using an ANOVA. The results show a statistical difference ($P < 0.05$) in the means of the tests before and after training. The average score was 2.49 points higher in the post-training test and varied between a range of 2.23 to 2.75 (90% confidence interval). No significant differences were found due to effects considered. Results showed an improvement in the understanding of the basic concepts of animal handling, regardless of the age, sex, language and educational level of the participants, and training year. Training in basic animal handling concepts could help improve the work quality, animal welfare and dairies productivity. 

**Key Words:** animal handling, dairy, training