



FARM Workforce Development

Nationwide Labor Survey Report

FARM Workforce Development (WFD) focuses on the people who work year-round to provide excellent cow care and produce wholesome milk: our dairy farm families and their employees. This new initiative has brought together stakeholders from the entire dairy value chain to create educational materials for U.S. dairy owners and managers. Resources include guidance and best management practices around human resources and on-farm safety. Additionally, FARM WFD has developed an on-farm evaluation tool to help farms learn about HR and safety management best practices; identify which best practices will be most useful to implement on their farm; and, track improvement over time.

Nationwide Labor Survey Results

In 2019, FARM commissioned a nationwide survey to better understand current labor practices on U.S. dairy farms. The survey was conducted by the Center for North American Studies (CNAS), part of Texas A&M University. The enclosed report contains the survey analysis and results.

The report identifies areas where U.S. dairy farms are implementing HR and safety best management practices. For example:

- Surveyed dairies offer over 13 hours of training per year on average, covering a wide breadth of content, including general orientation, safety, and job-specific technical skills.
- The average dairy, on a weighted basis, offers employees 1.4 days off in a typical week.¹
- Many dairies have a grievance procedure for pay issues and are utilizing electronic time tracking.
- Dairies offer a wide variety of non-wage benefits, including paid vacation leave and housing / a housing allowance. The average value of non-wage benefits for hourly employees was reported at \$6,756 per year.¹

At the same time, the research points to areas for growth. For example:

- The average turnover rate for surveyed dairies was 38.8%. While this is lower than the national average turnover for the private sector (47.1%)², it is still higher than ideal, especially when dairies report a high level of difficulty in filling open positions.
- Only about 14% of surveyed dairies report offering management & supervisory skills training.
- Pre-employment screenings, which can help ensure high-quality candidates are being selected, are being underutilized.

Next Steps

FARM is developing communications materials to widely share survey highlights. And, where there are areas for growth, FARM is working to develop educational resources and templates to support U.S. dairy farms in their journey of continuous improvement. Finally, FARM will be releasing a follow-on research report from CNAS analyzing factors that correlate with employee turnover.

¹ Average weighted by employee count.

² Employee separations includes employees that quit, were laid-off, or were discharged (i.e. fired). Does not include retirements or other separations. National average from Bureau of Labor Statistics 2019 Job Openings and Labor Turnover Survey.

A National Survey of Hiring, Compensation and Employee Treatment Practices on U.S. Dairy Farms

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Note: NMPF condensed the original research report provided by CNAS and updated table numbers and references accordingly. Additionally, NMPF provided an analytical note within the report. The report is otherwise unmodified from the original.

TABLE OF CONTENTS

Introduction..... 1

Dairy Farm Respondent Characteristics 1

U.S. Dairy Farms with and without Non-Family Hired Labor 4

Profile of Employee Numbers and Compensation on U.S. Dairy Farms 7

Wages, Working Conditions and Benefits on U.S. Dairy Farms..... 8

Communication on U.S. Dairy Farms..... 10

Employee Recruitment and Retention on U.S. Dairy Farms 11

Training and Safety on U.S. Dairy Farms..... 12

Community and Housing on U.S. Dairy Farms..... 13

References..... 15

A National Survey of Hiring, Compensation and Employee Treatment Practices on U.S. Dairy Farms

Introduction

During August–September 2019, the Center for North American Studies (CNAS) in the Department of Agricultural Economics at Texas A&M University directed the distribution of survey invitations to 3,000 randomly selected dairy farms from 26 organizations that participate in the Farmers Assuring Responsible Management (FARM) Program, which is managed by the National Milk Producers Federation (NMPF). These 26 dairy organizations represent over 19,200 dairy farms which marketed about 143.6 billion pounds of milk during 2018.

Of the 3,000 survey invitations distributed, 1,303 were distributed by Readex, the survey firm contracted to develop the hard-copy and online versions of the questionnaire as well as receive and assemble the resulting raw data, and 1,697 were distributed by one of ten organizations that distributed the survey to their members which were randomly selected by CNAS.

While 3,000 survey invitations were distributed, 54 of these were returned to Readex due to insufficient addresses resulting in a total sample of 2,946. There were 699 surveys returned by the end date of the survey, but eight were blank; thus, the final return rate was 23.5 percent (or $691 \div 2,946$). Surveys could be returned via mail or completed online: 626 (90.6 percent) were returned via mail while 65 (9.4 percent) were completed online.

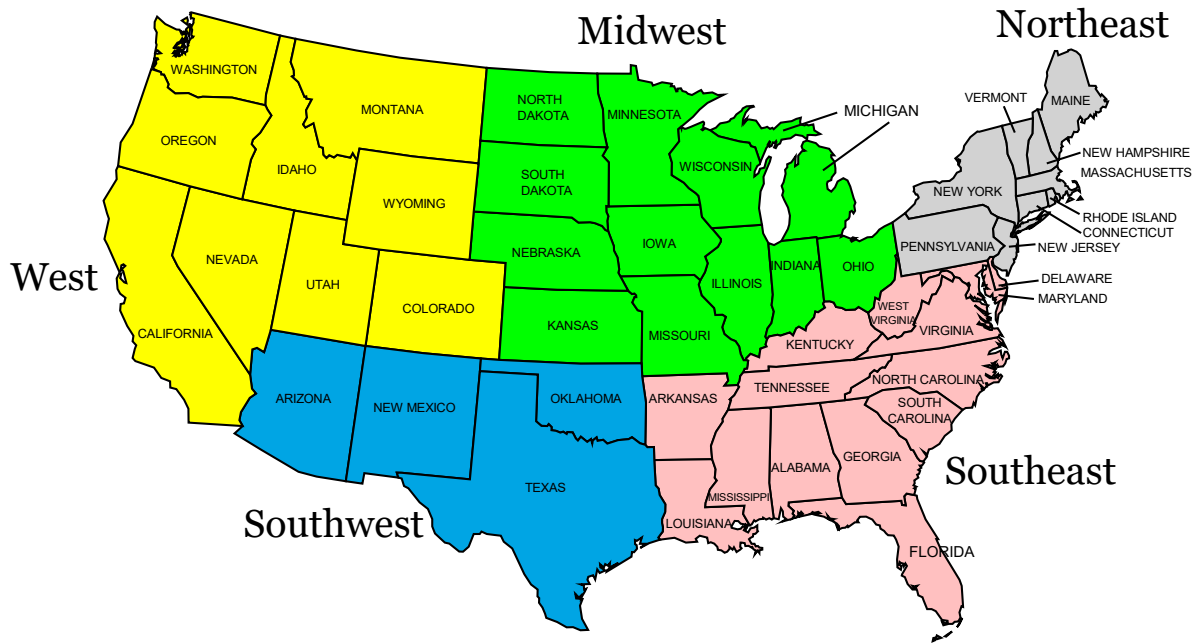
Dairy Farm Respondent Characteristics

The first six questions of the survey focused on demographic characteristics, including: whether the respondent owned or managed the dairy farm and for how long, the region of the country in which the farm was located, farm herd size, production per year, parlor configuration, and whether or not robotics were used. Nine respondents indicated they neither owned nor managed a dairy and discontinued their responses as requested, and another 50 either did not provide crucial information for herd size and production, or what they did provide were extremely unrealistic when taken in tandem. As a result, there were 632 total useable responses, or 91.5 percent of the 691 that returned the survey. This results in a margin of error of ± 3.838 percent at the 95 percent confidence level for the survey as a whole.

The first question addressed whether the respondent owned or managed an operation, with 94.2 percent of the 632 respondents owning their operation and 5.8 percent managing an operation. For those who owned their operation, the average length of ownership was 29.1 years while those who managed averaged 17.6 years of management.

The next question concerned region of the country. Regions, as shown in Figure 1, were loosely based on USDA National Agricultural Statistics Service (NASS) regions. As shown in Table 1, 42.4 percent of the respondents came from each of the Northeast and Midwest regions with 6.5 percent coming from the Southeast, 5.4 percent from the West, and 3.2 percent from the Southwest. While not identical to the USDA 2017 Census of Agriculture, the percentages of respondents roughly reflect the composition of operations in the United States.

Figure 1. Regions for the National Dairy Labor Use Survey, 2019



Source: Center for North American Studies, 2019

Table 1. Dairy Farm Respondents by Region

| Region of Country | Survey | Percent of Respondents | 2017 Census of Agriculture |
|-------------------|--------|------------------------|----------------------------|
| Northeast | 266 | 42.4% | 26.0% |
| Southeast | 41 | 6.5% | 12.2% |
| Midwest | 266 | 42.4% | 49.0% |
| Southwest | 20 | 3.2% | 2.8% |
| West | 34 | 5.4% | 10.0% |

Source: Center for North American Studies, 2019, and National Agricultural Statistics Service, USDA n=627

The next issues addressed were dairy farm herd size and production. The majority of the dairy farms responding had fewer than 100 cows on their farm, with 28.8 percent having less than 50 cows and 31.8 percent having 50 to 99 cows (Table 2). Even though dairy herd sizes in these two ranges dominate the responses, it is still lower than the combined percentages which fall in those herd size ranges as reported in the 2017 Census of Agriculture – 60.6 percent of survey respondents versus 74.4 percent as reported by NASS. Nonetheless, only herd sizes of less than 50 were a smaller proportion of survey respondents than reported by NASS; the other six herd size ranges were all slightly higher than the NASS reported percentages. Herd size ranges of at least 100 cows compose 71.2 percent of the respondents, and this is important as it soon will be shown that dairy farms with larger herd sizes are more apt to hire non-family labor, and this research focuses on labor use practices on U.S. dairies.

Table 2. Dairy Farm Respondent Production by Herd Size

| Herd Size Range | Survey | Percent of Respondents | 2017 Census of Agriculture |
|-----------------|--------|------------------------|----------------------------|
| 0-49 | 182 | 28.8% | 52.0% |
| 50-99 | 201 | 31.8% | 22.2% |
| 100-199 | 116 | 18.4% | 12.4% |
| 200-499 | 59 | 9.3% | 7.0% |
| 500-999 | 24 | 3.8% | 2.8% |
| 1,000-2,499 | 23 | 3.6% | 2.3% |
| >2,500 | 27 | 4.3% | 1.3% |

Source: Center for North American Studies, 2019, and National Agricultural Statistics Service, USDA n=632

As for production, respondents represented 272,562 cows which produced 67.8 million hundredweight (cwt = hundred pounds) of milk (Table 3). Each of these is roughly three percent of the 2018 totals as reported by NASS. Respondents reported an average milk production per cow of 24,870 pounds (lbs.), slightly higher than NASS’s reported average. These results when coupled with region and herd size representation indicate that the survey results are largely reflective of the U.S. dairy industry as a whole.

Table 3. Dairy Farm Respondent Herd Totals and Milk Production

| Production Statistics | Survey | 2018 NASS Reported | Percent of NASS Totals |
|-----------------------|------------|--------------------|------------------------|
| Reported Cows (Head) | 272,562 | 9,399,000 | 2.9% |
| Reported Milk (CWT) | 67,785,282 | 2,175,774,510 | 3.1% |
| Milk per Cow (lbs.) | 24,870 | 23,149 | 107.4% |

Source: Center for North American Studies, 2019, and National Agricultural Statistics Service, USDA n=632

The final dairy characteristic question posed before delving more deeply into labor hiring and use practices concerned the type of milking parlors the dairies employed. The plurality, 43.3 percent, of dairies used a Tie-stall parlor type, with Herringbone-type (21.9 percent) and Parallel-

type parlors (18.3 percent) composing much of the remainder (Table 4). Swing-type parlors (3.5 percent), Robotics (2.9 percent), and Rotary-type parlors (2.1 percent) rounded out the much of the remaining parlor styles used by the respondents. The 2014 NAHMS Survey by the Animal and Plant Health Inspection Service, USDA (APHIS) indicated 52.6 percent of dairy operations used a Tie-stall milking system while 35.6 percent of dairies had either a Herringbone-type or Parallel-type milking parlor. The NAHMS survey results are fairly similar to the survey result shown in Table 4. A large majority of the Tie-stall systems were on smaller dairy farms in the NAHMS data. Table 5 indicates that very few dairies responding use robotics.

Table 4. Dairy Farm Respondent Milking Parlor Types¹

| Parlor Type | Survey | Percent of Respondents |
|-----------------------|--------|------------------------|
| Tie-stall | 286 | 45.4% |
| Herringbone | 145 | 23.0% |
| Parallel | 121 | 19.2% |
| Swing | 23 | 3.7% |
| Rotary | 14 | 2.2% |
| Other: | 72 | 11.4% |
| <i>Robots/Robotic</i> | 19 | 3.0% |
| <i>Parabone</i> | 13 | 2.1% |
| <i>Step-up</i> | 13 | 2.1% |
| <i>Flat Parlor</i> | 5 | 0.8% |
| <i>Side Open</i> | 2 | 0.3% |
| <i>Other</i> | 20 | 3.2% |

Source: Center for North American Studies, 2019
n=630

Table 5. Dairy Farm Respondent Level of Automation

| Automation | Survey | Percent of Respondents |
|------------|--------|------------------------|
| None | 570 | 94.5% |
| Partial | 16 | 2.7% |
| Total | 17 | 2.8% |

Source: Center for North American Studies, 2019
n=603

U.S. Dairy Farms with and without Non-Family Hired Labor

As stated, this survey and related research focuses on hiring, compensation and employee

¹ Note: for this and other survey questions, more than one response could be selected, More than one response could be selected, so total may exceed 100% when summing across categories.

treatment practices on U.S. dairy farms. Thus, question 7 on the survey inquired as to whether or not the dairy farm hired non-family labor. Table 6 shows that 251 respondents, or 39.7 percent, hired non-family employees while 381 (60.3 percent) did not. This is to be expected as smaller farms represent 60.6 percent of respondents and smaller farms are much less likely to hire non-family labor than larger farms. Further, the 251 responses from dairies that hire non-family results in a margin of error of +/-6.19 percent at the 95 percent confidence level for surveyed farms with hired labor. As not every respondent answered every question, the margins of error will increase slightly for those questions which fewer dairies completed.

Table 6. Dairy Farms Hiring Non-Family Employees

| Non-Family Employees | Survey | Percent of Respondents |
|----------------------|--------|------------------------|
| Yes | 251 | 39.7% |
| No | 381 | 60.3% |

Source: Center for North American Studies, 2019; n=632

Before discussing the labor practices of the respondents that hire non-family labor, a brief comparison of the characteristics of those farms that do hire non-family labor and those that do not is merited. While ownership is the dominant status for the respondents, those respondents with non-family labor were slightly less likely to own, but when the respondent owns the farm, the tenure of ownership is eleven years longer than when the farm does not employ non-family labor (Table 7).

Table 7. Dairy Ownership and Management: Comparison by Non-Family Hired Labor Status

| | Non-Family Employees | No Non-Family Employees |
|-----------------------|----------------------|-------------------------|
| Own | 91.1% | 96.3% |
| Average Years Owned | 38.8 | 27.7 |
| Managed | 8.9% | 3.7% |
| Average Years Managed | 8.5 | 19.2 |

Source: Center for North American Studies, 2019; n=622

Those dairies with non-family employees are much more concentrated on farms with 100 or more cows than those dairies without non-family employees (Table 8). This large difference in respondent herd size results in 247,771 of the cows (90.9 percent) and 62,602,753 cwt (92.4 percent) of milk production being on responding dairy farms with non-family labor (Table 9). Average milk production per cow was 25,146 lbs. on farms with non-family employees while the average on those without non-family employees was 20,905 lbs.

Table 8. Dairies by Herd Size: Comparison by Non-Family Hired Labor Status

| Herd Size Range | Non-Family Employees | No Non-Family Employees |
|-----------------|----------------------|-------------------------|
| 1-49 | 8.4% | 42.3% |
| 50-99 | 15.1% | 42.8% |
| 100-199 | 25.9% | 13.4% |
| 200-499 | 21.1% | 1.6% |
| 500-999 | 9.6% | 0.0% |
| 1,000-2,499 | 9.2% | 0.0% |
| >2,500 | 10.8% | 0.0% |
| Total | 100% | 100% |

Source: Center for North American Studies, 2019; n=632

Table 9. Milk Production: Comparison by Non-Family Hired Labor Status

| Production Statistics | Non-Family Employees | No Non-Family Employees |
|-----------------------|----------------------|-------------------------|
| Reported Cows (Head) | 247,771 | 24,791 |
| Reported Milk (CWT) | 62,602,753 | 5,182,529 |
| Milk per Cow (Lbs.) | 25,146 | 20,905 |

Source: Center for North American Studies, 2019; n=632

The final contrast involves parlor type. Those respondents with non-family employees typically use either a Herringbone or Parallel parlor style while those without non-family employees are much more likely to use a Tie-stall type of parlor (Table 10). The relationship between dairies without non-family employees and Tie-stall systems is most likely due to size. Tie-stalls are most common on small dairies and small dairies are less likely to employ non-family hired labor. The presence of robotics on dairy farms is fairly low regardless of the presence of non-family employees or lack thereof.

Table 10. Dairy Parlor Type: Comparison by Non-Family Hired Labor Status

| Parlor Type | Non-Family Employees | No Non-Family Employees |
|-------------|----------------------|-------------------------|
| Herringbone | 33.6% | 16.1% |
| Parallel | 32.0% | 10.8% |
| Tie-stall | 19.2% | 62.6% |
| Rotary | 4.8% | 0.5% |
| Swing | 3.6% | 3.7% |
| Other | 12.8% | 10.5% |

Source: Center for North American Studies, 2019; n=630

More than one response could be selected, so total may exceed 100% when summing across categories.

The remainder of this paper will address hiring, compensation, and other labor practices on U.S. dairy farms.

Profile of Employee Numbers and Compensation on U.S. Dairy Farms

For those dairy farms that hire non-family employees, an average of 11.5 full-time and 2.0 part-time employees are hired resulting in 13.5 employees hired on average (Table 11). If one were to consider full-time equivalency (FTE), the average number of FTE employees would be 12.5 if it is assumed that each part-time employee works approximately half-time. Generally, as the herd size increases, the number of employees required increases as well.

Table 11. Average Number of Employees and Compensation on U.S. Dairy Farms

| | Full-Time | Part-Time | Total | FTE |
|------------------|-----------|-----------|-------|------|
| Average by Dairy | 11.5 | 2.0 | 13.5 | 12.5 |
| M.o.E. (+/-) | 3.63 | 0.43 | 3.69 | 3.65 |

Source: Center for North American Studies, 2019; FTE = Full-Time Equivalents, each Part-Time employees counted as ½ of an FTE. n=228

When considering how these data apply to the U.S. industry as a whole, it was determined that even though dairies with larger herd sizes were slightly over-represented when compared to NASS reported proportions, extrapolation is appropriate as a substantial number of smaller dairies participated in the survey. Thus, the total number of employees on U.S. dairy farms is estimated to be 129,453 during 2018; the FTE number of employees is 116,406 (Table 12). The CNAS research team had previously conducted dairy labor surveys during 2008 and 2013, though focused on other issues. As expected, the trend shows fewer employees over the years as the number of dairies has decreased and those larger farms which employ labor are utilizing more advanced technologies and techniques to maximize milk production.

Table 12. Employment on U.S. Dairy Farms, 2008–2018

| Survey Year | Total Employees | FTE Employees |
|-------------|-----------------|---------------|
| 2018 | 129,453 | 116,406 |
| 2013 | 150,418 | 132,255 |
| 2008 | 188,631 | 138,124 |

Source: Center for North American Studies, 2019; 2015; 2009. FTE = Full-Time Equivalents, each Part-Time employees counted as ½ of an FTE.

Analytical Note

NMPF requested that the analysis include weighted averages by employee count. This was requested to better capture the experience of U.S. dairy employees. The weighted average cannot be interpreted as the average employee experience, however, it can loosely signify the average % of dairy employees that work on a dairy with a given characteristic. For example, 82.6% of dairies provide electronic time tracking a weighted average basis. This means that approximately 82.6% of dairy employees work on a dairy that provides electronic time tracking

– but this does not signify that 82.6% of dairy employees actually utilize electronic time tracking and it also does not signify that 82.6% of dairies have electronic time tracking.

For topics that concern labor conditions, weighted average is presented. For topics more related to the dairy operation itself, a straight average of all dairy farms is presented.

Wages, Working Conditions and Benefits on U.S. Dairy Farms

Now the focus of this discussion is turned exclusively to labor practices on U.S. dairies beginning with working conditions. Table 13 shows the average milk shift duration and days-off on U.S. dairies.

Table 13. Milk Shift Duration and Days-off on U.S. Dairy Farms

| | Typical Milk Shift (Hours) | Days-Off/Week |
|-------------------|----------------------------|---------------|
| Weighted Average* | 8.5 | 1.4 |

Source: Center for North American Studies, 2019; n=209; *Average weighted by employee count.

Dairies employ a wide variety of methods and processes to ensure employee payment is accurate to both employee and to the dairy, summarized in Table 14.

Table 14. Hour Tracking and Other Payment Procedures on U.S. Dairy Farms

| | Electronic Time Tracking | Work Hours Validation Process | Pay Issue Grievance Procedure | Flexibility in Scheduling Work Hours in Advance | Break Tracking | Pay Stub with Itemized Deductions | Break Area | None |
|-------------------|--------------------------|-------------------------------|-------------------------------|---|----------------|-----------------------------------|------------|------|
| Weighted Average* | 82.6% | 58.7% | 76.8% | 87.6% | 33.8% | 89.6% | 86.8% | 0.7% |

Source: Center for North American Studies, 2019; n=223; *Average weighted by employee count. More than one response could be selected, so total may exceed 100% when summing across categories.

Table 15 summarizes the use of job description on dairy farms.

Table 15. Job Descriptions U.S. Dairy Farms

| | Written Job Descriptions? |
|-------------------|---------------------------|
| Weighted Average* | 58.7% |

Source: Center for North American Studies, 2019; n=216 *Average weighted by employee count.

Table 16 shows that the average starting wage for employees with little or no experience is \$11.24 per hour while the average wage is \$13.90 per hours for those paid on an hourly basis (Average weighted by employee count). When weighted by number of employees receiving the range of reported salaries, the average salary is \$65,301 per year. Neither of these include the costs associated with any benefits the dairy may offer.

Table 16. Average Compensation on U.S. Dairy Farms

| | Average Starting Wage | Average Hourly Wage** | Average Salary** |
|-------------------|-----------------------|-----------------------|------------------|
| Weighted Average* | \$11.24 | \$13.90 | \$65,301 |

Source: Center for North American Studies, 2019; n=228; *Average weighted by employee count. **Hourly wage excludes salaried employees; and salary excludes hourly wage employees.

A wide variety of non-wage benefits are offered by U.S. dairy farms to their employees, led by paid vacation leave and housing or housing allowances (Table 17). The most common “Other” benefits are retirement plans and food.

Table 17-A. Non-Wage Benefits Offered by U.S. Dairy Farms

| | Employer Sponsored Health Insurance | Housing/ Housing Allowance | Incentive Pay Program | Use of Farm-Owned Car/Truck | Mobile Health Clinic | Paid Vacation Leave | Paid Sick Leave |
|-------------------|-------------------------------------|----------------------------|-----------------------|-----------------------------|----------------------|---------------------|-----------------|
| Weighted Average* | 58.1% | 73.0% | 58.0% | 57.4% | 5.4% | 75.9% | 46.6% |

Source: Center for North American Studies, 2019; n=217; *Average weighted by employee count. More than one response could be selected, so total may exceed 100% when summing across categories.

Table 17-B. Non-Wage Benefits Offered by U.S. Dairy Farms

| | Clothing/ Uniforms Not Required by Law | Staple Foods | Group Transportation to Town | Utilities | Other | None |
|-------------------|--|--------------|------------------------------|-----------|-------|------|
| Weighted Average* | 29.9% | 5.9% | 5.6% | 38.5% | 17.9% | 4.4% |

Source: Center for North American Studies, 2019; n=217; *Average weighted by employee count. More than one response could be selected, so total may exceed 100% when summing across categories.

U.S. dairies incur costs when providing non-wage benefits. Table 18 shows the average value of these benefits as reported by the dairies; and, when coupled with wages paid, the average total compensation per year per employee.

Table 18. Value of Benefits Offered by U.S. Dairy Farms

| | Average Value of Benefits | Annual Salary @ 2,500 Hours/Year | Average Total Compensation for Hourly Wage Employees** |
|-------------------|---------------------------|----------------------------------|--|
| Weighted Average* | \$6,756 | \$35,037 | \$41,794 |

Source: Center for North American Studies, 2019; n=147; *Average weighted by employee count. ** Does not include salaried employees.

Note: 2,500 hours are used based on 50 hours per week for 50 weeks per year.

The final question related to benefits concerned what type of bonuses are offered by U.S. dairies, with year-end bonuses and milk quality/animal health-related bonuses being most common (Table 19). For “Other” bonuses offered, holiday, calf loss, performance, and feed bonuses were most commonly cited.

Table 19. Types of Bonuses Offered by U.S. Dairy Farms

| | Attendance | Year-End | On-Time | Quality/Health | Other | None |
|-------------------|------------|----------|---------|----------------|-------|-------|
| Weighted Average* | 4.7% | 55.0% | 5.9% | 45.5% | 29.4% | 21.3% |

Source: Center for North American Studies, 2019; n=211; *Average weighted by employee count. More than one response could be selected, so total may exceed 100% when summing across categories.

Communication on U.S. Dairy Farms

The next set of survey questions revolved around the types of communication present on U.S. dairies. Over half of U.S. dairies have employees who do not have English as their native language, and a similar amount of farms have Spanish speaking employees (Table 20). There are also about a quarter of the farms that do not have any employees which speak English, which is more commonly reported by larger dairy farms. About three-quarters of the dairies on which non-English is spoken provide translation for their employees.

There are also situations on U.S. dairies in which there are employees with limited literacy and education. The survey asked about accommodations for such workers (Table 21).

Table 20. Languages Spoken on U.S. Dairy Farms

| | Farms with Employees whose Native Language is not English | English Spoken by Employees | Spanish Spoken by Employees | K'iche Spoken by Employees | Other Languages Spoken | Translation for Non-Native English Speakers** |
|------------------|---|-----------------------------|-----------------------------|----------------------------|------------------------|---|
| Average by Dairy | 53.5% | 75.8% | 53.1% | 3.3% | 3.3% | 75.6% |
| M.o.E. (+/-) | 6.7% | 5.7% | 6.7% | 2.4% | 2.4% | 7.5% |

Source: Center for North American Studies, 2019; n=213, n=211, n=209; More than one language could be selected, so total may exceed 100% when summing across categories. **This category considers only those farms that have non-native English speaking employees.

Table 21. Accommodations for Limited Literacy/Education Employees on U.S. Dairy Farms

| | Signs with Visuals/Pictures | Training with Visual Materials | Spoken Word/ Recorded Messages |
|-------------------|-----------------------------|--------------------------------|--------------------------------|
| Weighted Average* | 61.6% | 57.9% | 78.2% |

Source: Center for North American Studies, 2019; n=157; *Average weighted by employee count.

More than one response could be selected, so total may exceed 100% when summing across categories.

Employee Recruitment and Retention on U.S. Dairy Farms

Employee turnover adds costs and creates challenges for businesses. Table 22 shows that dairy farms have an average turnover rate of 38.8 percent. The relative difficulty of finding new employees is four out of five.

Table 22. Turnover and Difficulty Finding Employees on U.S. Dairy Farms

| | Turnover Rate | Average Difficulty to Find Employees vs. Five-Years Ago (5 Highest) |
|------------------|---------------|---|
| Average by Dairy | 38.8% | 4.0 |
| M.o.E. (+/-) | 8.6% | 0.14 |

Source: Center for North American Studies, 2019; n=213, n=212.

Turnover rate reflects employee separations, including employees that quit, were laid-off, or were discharged (i.e. fired). Does not include retirements or other separations.

There are many mechanisms available to U.S. dairies in their efforts to recruit new employees. The most used technique is word-of-mouth with both the farm and current employees spreading the word that new employees are needed (Table 23).

Table 23. Employee Recruitment Techniques by U.S. Dairy Farms

| | Word-of-Mouth | Local Bulletin Boards | Ads in Local Papers | Social Media | Online Job Website | Recruiting/Placement Agencies |
|------------------|---------------|-----------------------|---------------------|--------------|--------------------|-------------------------------|
| Average by Dairy | 94.3% | 8.1% | 21.8% | 30.3% | 12.8% | 8.1% |
| M.o.E. (+/-) | 3.1% | 3.7% | 5.6% | 6.2% | 4.5% | 3.7% |

Source: Center for North American Studies, 2019; n=211.

More than one response could be selected, so total may exceed 100% when summing across categories.

U.S. dairies also conduct a variety of pre-employment screenings to help ensure they are hiring suitable workers (Table 24). About half of the dairies verify past employment and check references before hiring a new employee while about 19 percent verify applicant addresses. Other screening methods employed include interviews, background checks, and drug testing. Slightly more than a quarter do no pre-employment screenings.

Table 24. Pre-Employment Screening on U.S. Dairy Farms

| | Past Employment Verification | Reference Checks | Address Verification | Other | None |
|------------------|------------------------------|------------------|----------------------|-------|-------|
| Average by Dairy | 48.6% | 50.9% | 19.2% | 15.0% | 26.6% |
| M.o.E. (+/-) | 6.7% | 6.7% | 5.3% | 4.8% | 5.9% |

Source: Center for North American Studies, 2019; n=214

More than one response could be selected, so total may exceed 100% when summing across categories.

Training and Safety on U.S. Dairy Farms

Training and safety are important issues in agriculture in general and particularly on dairies as working conditions, whether animal or weather related, can sometimes create dangerous situations. A large percent of dairies offer training when an employee is initially hired, with a smaller percent training employees on an annual or monthly basis (Table 25).

Table 25. Frequency of Employee Training on U.S. Dairy Farms

| | Initially/ When Hired | Annually | Monthly | More Often than Monthly |
|------------------|--------------------------|----------|---------|----------------------------|
| Average by Dairy | 76.6% | 23.4% | 18.9% | 7.5% |
| M.o.E. (+/-) | 5.9% | 5.9% | 5.4% | 3.6% |

Source: Center for North American Studies, 2019; n=201

More than one response could be selected, so total may exceed 100% when summing across categories.

Types of employee training varied significantly; however, 95.8 percent of dairies cited on-the-job training while nearly half cited job shadowing (Table 26). Another 30 percent offered formal training, such as classroom style, and 16 percent used job rotation as a method of training.

Table 26. Types of Employee Training on U.S. Dairy Farms

| | Formal Training | On-the-Job Training | E-Learning | Job Shadowing | Job Rotation |
|------------------|--------------------|------------------------|------------|------------------|-----------------|
| Average by Dairy | 29.9% | 95.8% | 7.9% | 49.1% | 15.9% |
| M.o.E. (+/-) | 6.1% | 2.7% | 3.6% | 6.7% | 4.9% |

Source: Center for North American Studies, 2019; n=214

More than one response could be selected, so total may exceed 100% when summing across categories.

The content of employee training focuses on a general dairy orientation, safety, and animal handling, each being taught on at least 80 percent of dairy farms regardless of size. Job specific skills are taught on 73.1 percent of dairy farms, and farm policies are taught on 44.8 percent of farms (Table 27). Employees are training for an average of 13.3 hours per year. Relatively few dairies offer employee development or continuing education opportunities to their employees (Table 28).

Table 27. Employee Training Content and Hours per Year on U.S. Dairy Farms

| | General Orientation | Safety | Job Specific Technical Skills | Animal Handling | Farm Policies/ Handbook | Management/ Supervisor Skills | Other | Hours of Training/ Year |
|------------------|------------------------|--------|--|--------------------|-------------------------------|-------------------------------------|-------|-------------------------------|
| Average by Dairy | 84.9% | 84.9% | 73.1% | 89.6% | 44.8% | 13.7% | 4.2% | 13.3 |
| M.o.E. (+/-) | 4.8% | 4.8% | 6.0% | 4.1% | 6.7% | 4.6% | 2.7% | 2.4 |

Source: Center for North American Studies, 2019; n=212, n=176

More than one response could be selected, so total may exceed 100% when summing across categories.

Table 28. Employee Development / Continuing Education on U.S. Dairy Farms

| | Employee Development/ Continuing Education Program Offered |
|------------------|--|
| Average by Dairy | 11.6% |
| M.o.E. (+/-) | 4.3% |

Source: Center for North American Studies, 2019; n=215

As expected, U.S. dairies of all sizes inspect and replace personal protective equipment (PPE) as needed, 86.3 percent nationwide. Nearly 80 percent of dairies nation-wide carry workers' compensation coverage (Table 29)

Table 29. Safety Equipment and Workers' Compensation on U.S. Dairy Farms

| | Personal Protective Equipment Inspected/ Replaced as Needed | Carry Workers' Compensation Coverage |
|------------------|---|--|
| Average by Dairy | 86.3% | 79.1% |
| M.o.E. (+/-) | 4.6% | 5.4% |

Source: Center for North American Studies, 2019; n=211, n=215.

An important part of training and safety is employee performance feedback and how often employees receive such feedback. Dairies most frequently offer informal feedback often or they offer feedback on an ongoing basis (Table 30).

Table 30. Frequency of Employee Job Performance Feedback on U.S. Dairy Farms

| | Annually | Quarterly | Monthly | Informal and Often | Ongoing | Not Sure |
|-------------------|----------|-----------|---------|-----------------------|---------|----------|
| Weighted Average* | 23.1% | 10.5% | 18.0% | 43.7% | 42.1% | 6.9% |

Source: Center for North American Studies, 2019; n=217; *Average weighted by employee count. More than one response could be selected, so total may exceed 100% when summing across categories.

Community and Housing on U.S. Dairy Farms

Providing a sense of community to employees can have positive impacts on most any business, including dairy farms. While half of U.S. dairies did not identify steps they took to provide a sense of community, about 28 percent of the others inform workers about local community events and/or hold business social events such as holiday or pizza parties (Table 31).

Table 31. Sense of Community on U.S. Dairy Farms

| | Introduce Workers to Neighbors | Inform Workers about Local Events | Provide List of Local Churches | Hold Business Social Events | Provide Recreation Facilities | Other | None |
|------------------|--------------------------------------|--|---|--------------------------------------|-------------------------------------|-------|-------|
| Average by Dairy | 16.9% | 27.7% | 4.7% | 28.6% | 4.7% | 7.0% | 50.2% |
| M.o.E. (+/-) | 5.0% | 6.0% | 2.8% | 6.1% | 2.8% | 3.4% | 6.7% |

Source: Center for North American Studies, 2019; n=213

More than one response could be selected, so total may exceed 100% when summing across categories.

Slightly more than half of U.S. dairy farms provide some sort of housing for their employees but handle payment for such housing in several different ways (Figure 32). Nearly 40 percent of farms simply include housing as part of their employee wages and benefits, and this approach grows with the size of the dairy. About 22.9 percent of dairies either charge rent that employees pay explicitly or have deducted from their wages

Table 32. Methods of Charging for Farm Provided Housing on U.S. Dairy Farms

| | No Additional Charge/Included in Wages | Rent/Payment Outside of Wages | Wage Deduction | Other | No Farm Housing Provided |
|------------------|--|-------------------------------------|-------------------|-------|--------------------------------|
| Average by Dairy | 39.7% | 12.6% | 10.3% | 2.8% | 47.2% |
| M.o.E. (+/-) | 6.6% | 4.4% | 4.1% | 2.2% | 6.7% |

Source: Center for North American Studies, 2019; n=214;

More than one response could be selected, so total may exceed 100% when summing across categories.

Of the 52.8 percent of U.S. dairies that do provide housing to employees, the process of inspecting and repairing this housing must be undertaken. 77.4 percent have a process in place for employees to request repairs (Table 33).

Table 33. Repair Requests on U.S. Dairy Farms

| | Process in Place for Employees to Request Repairs |
|------------------|---|
| Average by Dairy | 77.4% |
| M.o.E. (+/-) | 7.7% |

Source: Center for North American Studies, 2019; n=115

Percentages include only those dairy farms which provide employee housing.

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