

**Briefing no. 3**

**DAIRY WORKERS IN WISCONSIN:  
Tasks, shifts, wages, and benefits**

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**Introduction**

This document is part of a collection of reports in which we present the results of our recent research on labor relations on Wisconsin dairy farms. This project pays special attention to the important role that Latino immigrants now play in Wisconsin’s dairy industry. In this third document, we describe tasks, shifts, wages, and non-wage benefits and compare them across US-born and immigrant employees (and, in some cases, owner-operators).<sup>2</sup>

tion, and decision making. Also, employers who know or suspect that their immigrant employees lack legal authorization to live in the US may be unwilling to train and grant responsibilities to those workers. Our survey data also suggest that these differences are due to the length of time that workers have been employed at their current job. US-born dairy workers that we surveyed have, on average, worked at their current job for longer than their immigrant counterparts, 6.3 compared to 2.8 years respectively.<sup>3</sup> Further analysis is needed to determine whether immigrant and US-born workers are able to advance at equal rates.

**Who Does Various Dairy Farm Tasks**

Figures 1 and 2 show that US-born and immigrant workers tend to do different tasks on dairy farms. Over 60 percent of all immigrant workers surveyed were milkers or pushers (which includes scraping manure and bringing cows to the parlor for milking), while only 16 percent of native worker reported this as their main job; the jobs of milker and pusher are relatively routine jobs, with less decision making than other farm jobs. Very few immigrants report being in the herd manager position, which is higher paid and has higher expected level of decision making. Native workers are more likely to report being a feeder; although feeding does not necessarily require higher levels of decision making, it does require the use of heavy equipment, including expensive mixers and tractors.

Several factors are likely explanations for the different distribution of immigrants and native workers across these jobs. Many immigrant workers have limited English skills, and most farmers possess limited Spanish skills. This communication barrier may limit immigrant employees’ abilities to advance to the higher-paying jobs that demand more responsibility, communica-

Figure 1: Immigrant Worker Farm Tasks

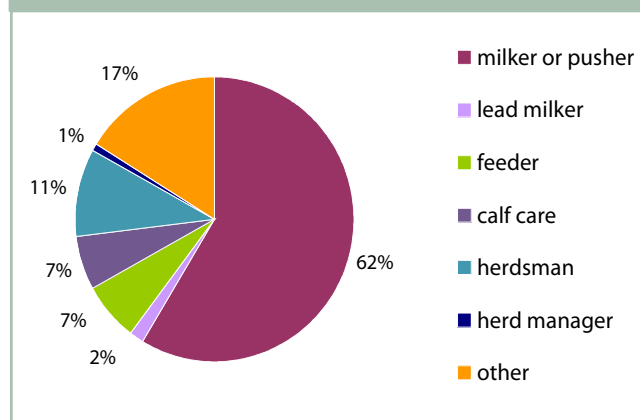
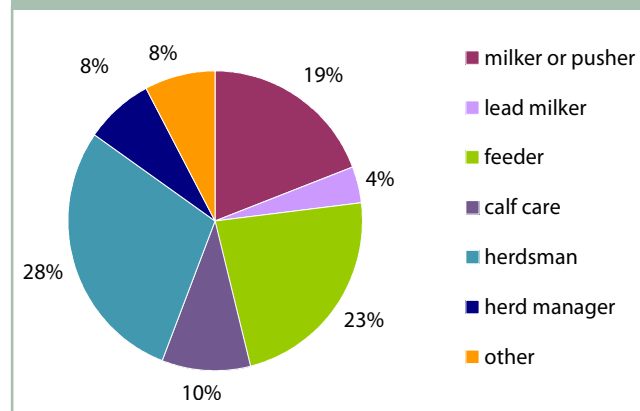


Figure 2: US-born Worker Farm Tasks



## Dairy Farm Work Shifts

In addition to seeing native and immigrant workers in different farm jobs, there are also differences in terms of the shifts they are covering on the farm. Figure 3 below shows the demographic distribution of workers for each shift on dairy farms. “Shift 1” is the early day shift, “Shift 2” is the afternoon shift, and “Shift 3” is the late night shift (which exists primarily on the larger farms, where cows are milked three times per day).

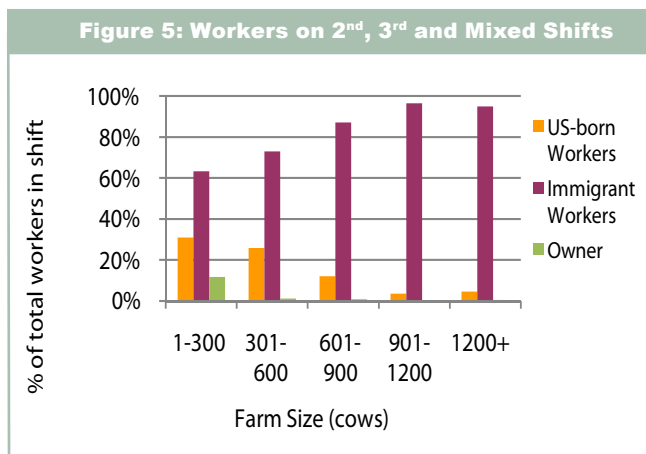
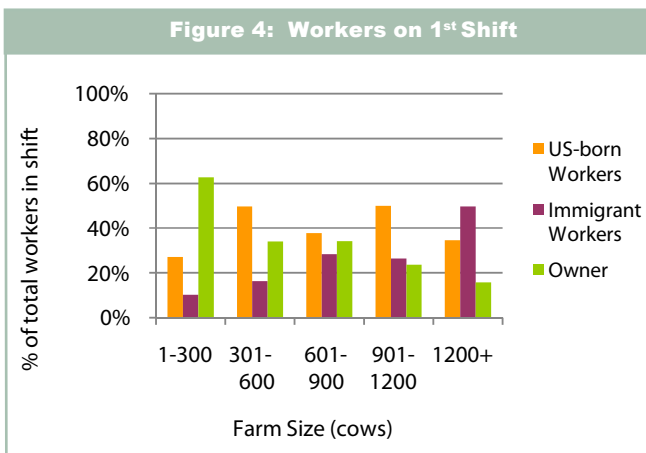
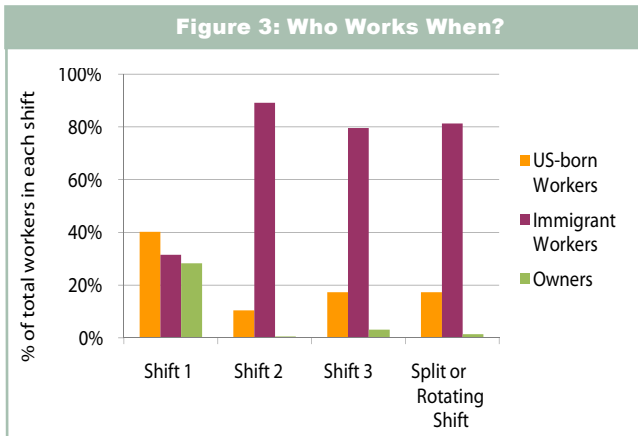


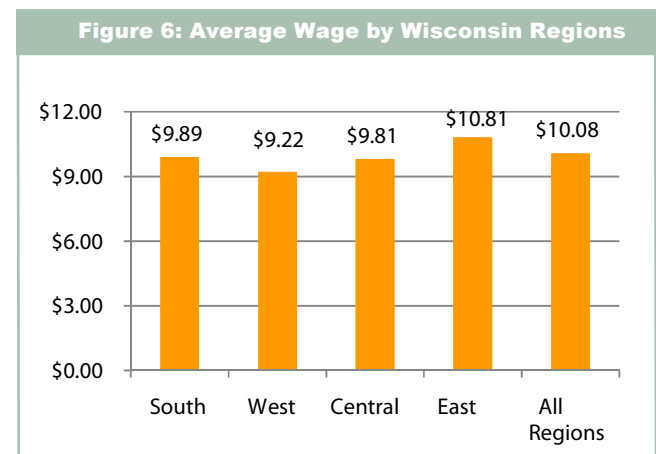
Figure 3 shows that one-third of all workers, including owners, working the 1st shift on the dairy farm, are immigrants. What is striking is the predominance of the immigrant workers in the 2nd, 3rd, and Split/Rotating shifts. On dairy farms milking three times per day, a 2nd shift would involve the tasks centered around the 2nd milking, including the person scraping manure in the entry to the parlor and lanes, as well as bringing the cows to the parlor. The 2nd shift might also include calf care and feeding. The 3rd shift would primarily include milking, scraping, and leading cows to the parlor, and it might also include some calf care or watching for cows who are calving.

Figures 4 and 5 show that the distribution of labor by shift differs by farm size. Immigrant workers are responsible for a greater share of the 1st shift labor as farm size increases. Likewise, as shown in figure 5, they are providing the bulk of the labor in the other shifts, particularly as farm size increases.

## Wages Paid on Wisconsin Dairy Farms

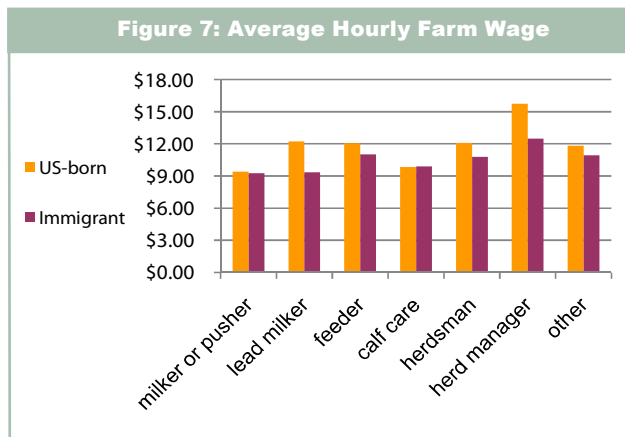
Our survey of Wisconsin dairy farmers and their employees also examined the wages paid to workers. Overall, the average wage paid to workers in our survey is \$10.06 an hour. In 2008 the USDA calculated an average wage for all Wisconsin farm workers including dairy workers at \$10.71.<sup>4</sup> Workers in our survey work an average of 57 hours/week and report an average of 4.8 days off a month. However, not surprisingly, we see that wages vary significantly according to region, what job one does on the farm, worker origin (US-born or immigrant), and experience at current employer, and non-wage benefits. The figures below attempt to paint a picture of the significant factors impacting wages on Wisconsin dairy farms.<sup>5</sup>

Figure 6 shows the wage variation by region. These differences are statistically significant.<sup>6</sup> For example, a worker in the Eastern region, which would include the areas east and northeast of Lake Winnebago, can



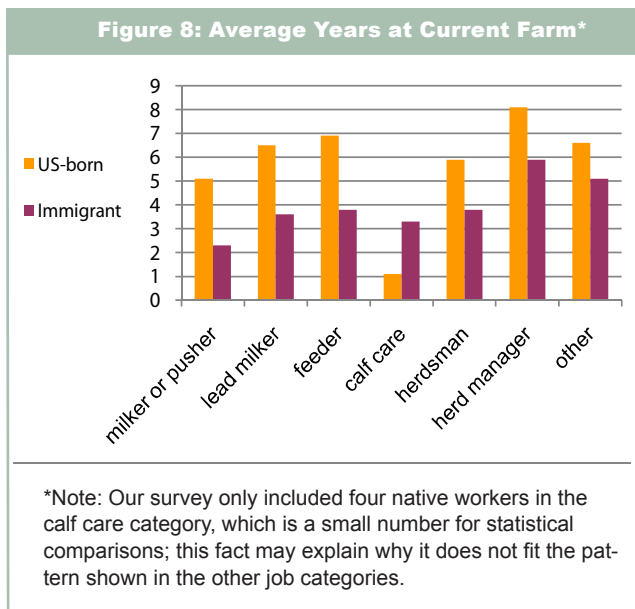
expect a wage that is \$0.84-\$1.74 higher than the average wage in other regions, all else being equal.

Our statistical analysis also shows a significant difference in wages based on what job the worker does on the farm. Figure 7 illustrates this differential. The position of herd manager is the highest paid job on the farm. Milking and pushing constitute the lowest paid job category. Based on our calculation, a herd manager can expect to receive \$2.85 more an hour and milkers can expect \$0.88 less than the same



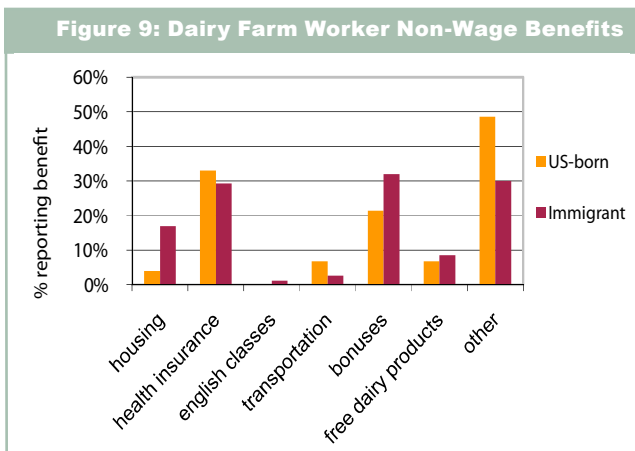
worker performing another job on the farm. Figure 7 also shows that the average immigrant wage is lower than the average native wage in most job categories. Our analysis indicates that the effect of worker origin on wages is statistically significant. On average, we expect that a native worker would receive \$1.04 more than a similar immigrant worker. As we discussed early in regards to the distribution of who does which jobs on dairy farms, the lower wage seen for immigrant workers may be related to language ability and legal vulnerabilities. Our survey data do not allow us to measure exactly how much these factors impact workers' wages.

In addition, wages are affected by the amount of time that a worker has worked at their current place of employment. Figure 8 shows that there is a large difference between average work tenure between immigrant and native workers. Our regression analysis suggests that a worker would get \$0.32 more per hour for every year worked on the farm (controlling for other variables). Our results also indicate that immigrant workers will get a bigger pay "reward" than native workers (estimated to be \$0.16 cents more a year) for staying with a farm. However, as noted earlier, we are not able to predict whether immigrant workers are moving out of entry-level positions at the same rate as native workers.



### Non-Wage Benefits

Figure 9 illustrates the average responses we received from US-born workers and immigrant workers regarding the non-wage benefits that they receive. Note that the most common benefits listed in the "other" category for US-born workers were vacation and retirement (401k); in contrast, "other" for immigrant workers typically referred to vacation. The most common single benefit was health insurance, though less than one-third of all employees reported receiving any coverage through their employer. US-born workers were only slightly more likely than immigrant employees to report getting some health insurance benefit (33 vs. 29 percent). Another common benefit was bonuses, which were reported by 32 percent of immigrant workers and 21 percent of US-born employees. Transportation and free dairy products were offered to less than 10 percent of employees, and one percent of immigrant employees reported being offered English classes.



There is a significant statistical relationship between wages and housing and health insurance benefits. When controlling for other variables, our statistical analysis shows that a worker reporting a housing benefit can expect a \$0.86 lower wage than a similar worker not receiving a housing benefit. This indicates that housing is acting as part of a wage. Workers receiving health insurance as a benefit can expect a higher wage (\$0.58 based on our analysis).

Employer-provided housing was much more common for immigrant laborers (17 percent) than US-born ones (4 percent). We cannot draw many conclusions from this finding, however, because “housing” as a benefit could mean many very different things. This benefit could mean that the worker gets free housing on the farm, housing on the farm at rental rates that are below market value, or the option of living on the farm but at (or above) rental market rate. Also, the quality of the housing can vary widely.

## Conclusions

In this document, we have used the results of our recent survey to describe who does the different tasks on dairy farms, the times of day that they work, and the wages they earn. We see a clear difference in the jobs that native and immigrant workers perform on Wisconsin dairy farms. Immigrant workers are more likely to perform entry-level jobs, such as milking and “pushing.” Also, immigrant workers are providing the

majority of the labor on farms outside of the regular “1st shift.” The differences also are seen by farm size, with immigrant labor making up a larger portion of the total labor in all shifts on the larger farms. Our research shows that when evaluating differences in wages paid to native and immigrant workers, we must consider the region in which they work, the job they perform on the farm, the number of years at their current farm, and the non-wage benefits they receive.

In our minds, a crucial question is whether immigrant and US-born employees have the same opportunities to receive raises, to learn new skills, to take on responsibilities, and to otherwise flourish in the workplace. Two factors that undoubtedly shape immigrants’ abilities to do so are language barriers and legal status issues. Our research suggests that programs pertaining to language training, farm management skills, and small business development assistance for minority farmers and farm workers should be pursued. That said, it should be recognized that working the 2nd, 3rd, and split shifts likely makes it difficult for immigrant dairy employees to attend traditional language classes and/or spend time with their families in the evening hours. Finally, the social vulnerabilities and inequalities facing this new population underscore the need for meaningful federal immigration reform that honors immigrants as both workers and full members of the communities in which they live and to which they contribute.

### **The Program on Agricultural Technology Studies is a unit of the University of Wisconsin - Madison and of the University of Wisconsin - Cooperative Extension**

For further information on the content of this report or others in the series, contact Jill Harrison, Assistant Professor, Department of Rural Sociology, University of Wisconsin - Madison: [harrison@drs.wisc.edu](mailto:harrison@drs.wisc.edu) or 608/890-1370

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## Endnotes

<sup>1</sup> Harrison is Assistant Professor of Rural Sociology at UW-Madison and is this project’s principal investigator. Lloyd and O’Kane are graduate students at UW-Madison. This research was generously supported by the Program on Agricultural Technology Studies (PATS) at UW-Madison, USDA Hatch grant #WIS01272, and the Frederick H Buttel Professorship funds. We would like to recognize Julia McReynolds and Brent Valentine for their invaluable research assistance in 2006-2008, and Alan Turnquist, Sam Kanson-Benanav, Brad Barham, Jack Kloppenburg, Enrique Figueroa, John Bauknecht, and Dick Okray for their helpful insights on earlier drafts.

<sup>2</sup> The information we present in this series of documents showcases several new sources of original data. First, in early 2007, we conducted seven focus groups with a total of over 50 dairy and other farmers throughout Wisconsin. Second, in early 2008, we conducted a survey of 83 dairy farmers throughout Wisconsin and many of their non-family employees (103 US-born workers and 270 immigrant workers). We oversampled large farms in order to interview as many immigrant workers as possible. Although this was not a representative sample of the Wisconsin dairy farm labor force, we drew on other survey findings and statistically adjusted our data at several points in these documents (as indicated) in order to make our data representative of the entire state’s dairy farm sector. Our surveys in 2008 were brief questionnaires conducted in person in the workplace by a bilingual researcher. Our survey probably does not fully capture the experiences of many temporary or informal dairy employ-

ees. Third, in early 2008, we conducted in-depth interviews with 12 immigrant workers and some of their family members in Spanish at their homes.

<sup>3</sup> Moreover, as we discuss later in this document, milkers and pushers, on average, tend to have worked at their current farm for a shorter amount of time than average, and herd managers have worked at their current farm for longer than average.

<sup>4</sup> The National Agricultural Statistical Service does not publish numbers specific to dairy workers. The 2008 state average of \$10.71 includes crop and livestock workers as well as wages paid to workers in supervisory roles. Crop workers tend to have higher wages in WI (\$10.90) than livestock workers. The report that details states and regions can be found at <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1063>

<sup>5</sup> The figures show the average values from our survey data, and the examples given in the text use regression analysis coefficients to illustrate the wage differentials caused by the different variables.

<sup>6</sup> In our statistical analysis of wages we measure statistical significance at a p-value of .05 or less. When differences between numbers are not statistically different, they may be numerically different but are treated as being the same because chance and error in collecting the data may explain the discrepancy. For a full report on the regression results please contact the authors.