Over the last decade, the Program on Agricultural Technology Studies (PATS) at the University of Wisconsin-Madison has received a wide range of formal and informal comments from Wisconsin farmers regarding the direction of university research and extension programs. In an era of declining Extension budgets, increasing privatization, and a rapidly changing farm structure, the debate about where to focus scarce public resources takes on an added significance. Is there still an important role for land grant institutions to play in agriculture in the new century? If so, how can limited resources be targeted most effectively? What do farmers and other citizens want from the land grant system?

In order to systematically solicit farmer feedback on these issues, a series of questions about research and extension programs at the University of Wisconsin was included in the PATS 1999 Wisconsin Dairy Farm Poll, a statewide survey sent to 1,600 randomly selected dairy farmers. While the results summarized below focus primarily on the responses of dairy farmers, similar questions were asked of other types of farms in a separate survey sent out at the same time. In general, the response patterns of the non-dairy farmers were similar to those of the dairy farm sample.

Compared to published state statistics, the 804 dairy operators who responded to the survey appear to be reasonably representative of the state’s dairy farm sector. Their average herd size was 75 cows in 1999; with roughly 41 percent of farms milking under 50 cows, another 43 percent milking between 50-99 cows, and 16 percent milking over 100 cows. Roughly 14 percent reported the use of freestall barns and parlor milking facilities. The average respondent was 47 years old.

Dairy farmers support public agricultural research

Around half of the dairy farmers surveyed agree that “the need is greater than ever for publicly funded agricultural research programs” (see Figure 1). Only a minority of respondents, 18 percent, disagree with this statement. Examined from a slightly different angle, relatively few dairy farmers believe that research by the agribusiness sector can take the place of research carried out by the University Experiment Station (see Figure 2). In both cases, roughly a third of respondents remain undecided about the value of publicly funded agricultural research, and unsure about whether work done by private agribusiness can replace it. Operators from the larger dairy farms were the most likely to see the need for publicly-funded research programs and the least likely to believe that research in the private sector could take its place.

Figure 1: The need is greater than ever for publicly funded agricultural research programs

![Graph showing responses to the question: The need is greater than ever for publicly funded agricultural research programs.]

**Agree** 46%  **Not Sure** 36%  **Disagree** 18%
Dairy farmers support research for small and medium-sized farms

Survey respondents were asked to indicate whether they agreed or disagreed with a series of statements about where public agricultural research resources should be targeted. These statements contained choices about whether government sponsored research programs should be targeted to benefit small and medium-sized farms, the most progressive farms, or all types of farms (see Figure 3).

An overwhelming majority of respondents, 84 percent, agree that government supported research should help all types of farms whenever possible. When asked to prioritize the types of farms that should benefit from public research, dairy farmers responded most favorably to the idea of focusing on small and medium-sized farms. Sixty-five percent of respondents agree that government supported research should be targeted to benefit small and medium-sized farms. In sharp contrast, only 15 percent agree that government supported research should be targeted to help the most progressive producers.

Not surprisingly, preferences for different research directions were related to the size of the dairy herd of the respondent. Operators of larger dairy farms were more interested in research aimed at “the most progressive producers,” while operators of smaller herds favored research aimed at their herd size. Nonetheless, among operators with herd sizes above 100 cows, over 50 percent still agree that public research should target small and mid-sized farms.

Farm entry and low-cost technologies are top research priorities

The survey presented respondents with a list of possible research topics and asked whether they saw them as a low or a high priority for the
University of Wisconsin. As Figure 4 illustrates, over two-thirds of respondents believe that helping young people get into farming is a high priority. A close second, seen as a high priority by over 60 percent of respondents, was “low-cost technologies appropriate for mid-sized farms.” The lowest ranking research topic, identified as a high priority by less than 15 percent of respondents, was “ways to help livestock producers expand operations.” Even among operators with herd sizes over 100 cows, only 27 percent feel that expansion is a high research priority.

For the most part, the research priorities identified by respondents were consistent with issues that affected small and medium-sized operations rather than those that were only relevant to large-scale or expanding operations. To accomplish research goals, most farmers looked for increased contact between scientists and farmers. Indeed, Figure 5 shows that 68 percent of respondents agree with the statement that “closer linkages between university scientists and farmers need to be developed.”

**Farmer utilization of UW-Extension programs increases with herd size**

Wisconsin dairy farmers reported high levels of contact with UW-Extension during the past year. As displayed in Table 1, farmers’ most frequent contact was through reading an Extension publication or article. Nearly 76 percent of respondents said they had read something from Extension two or more times during the past year. Direct personal contact with a county extension agent was less common, although still impressive. Around half the survey respondents reported having called or spoken with their agent in the past year. Slightly more than 22 percent of dairy farmers reported that an agent visited their farm during the past year. This means that Wisconsin extension agents visited around 5,000 dairy farms that year.
Farmer utilization of Extension services is highly variable and appears to be correlated with the size of the farm. Table 2 shows that larger producers were significantly more likely to have called or spoken with an extension agent, had an agent visit their farm, or visited a county extension office during the past year than were smaller producers. For example, 43 percent of farms with herd sizes of over 100 cows had an agent visit their farm during the past year, in comparison with only 14 percent of those with herd sizes of less than 50 cows. Likewise, producers with herd sizes of more than 200 were more than twice as likely to report having consulted with their agent more than three times during the past year, than were producers with herd sizes of under 50 cows.

While these data indicate a clear relationship between farm size and utilization of Extension, our findings cannot explain why operators of larger farms tend to utilize Extension more extensively. It is not clear whether operators of larger farms receive more services because they are more likely to request them or whether these numbers are an indication that the types of information and programs available from UW-Extension are more applicable to larger operations than smaller ones.

### Table 1: Levels of contact with Extension

<table>
<thead>
<tr>
<th>Type of contact</th>
<th>Never</th>
<th>One</th>
<th>Two or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read an extension publication or article</td>
<td>14%</td>
<td>11%</td>
<td>76%</td>
</tr>
<tr>
<td>Visited my county extension office</td>
<td>47%</td>
<td>20%</td>
<td>34%</td>
</tr>
<tr>
<td>Called or spoke with my county extension agent</td>
<td>50%</td>
<td>17%</td>
<td>33%</td>
</tr>
<tr>
<td>Attended an extension meeting or workshop</td>
<td>65%</td>
<td>15%</td>
<td>19%</td>
</tr>
<tr>
<td>Had an extension agent visit my farm</td>
<td>78%</td>
<td>14%</td>
<td>9%</td>
</tr>
</tbody>
</table>

*Percent of operators within herd size category reporting any contact during the past year.

### Table 2: Contact with Extension by herd size

<table>
<thead>
<tr>
<th>Type of contact during past year*</th>
<th>1 to 49 cows</th>
<th>50 to 99 cows</th>
<th>100 to 199 cows</th>
<th>over 200 cows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read an extension publication or article</td>
<td>79%</td>
<td>90%</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td>Visited county extension office</td>
<td>43%</td>
<td>59%</td>
<td>61%</td>
<td>66%</td>
</tr>
<tr>
<td>Called or spoke with extension agent</td>
<td>37%</td>
<td>54%</td>
<td>71%</td>
<td>69%</td>
</tr>
<tr>
<td>Attended extension meeting/workshop</td>
<td>22%</td>
<td>41%</td>
<td>50%</td>
<td>48%</td>
</tr>
<tr>
<td>Extension agent visited farm</td>
<td>14%</td>
<td>22%</td>
<td>37%</td>
<td>62%</td>
</tr>
</tbody>
</table>

*Percent of operators within herd size category reporting any contact during the past year.
Satisfaction with UW-Extension increases with personal contact and size of operation

Most dairy farmers give UW-Extension programs high marks. Indeed, just over 58 percent of respondents agree that UW-Extension programs have been beneficial to their farm businesses, while only 16 percent disagree. Meanwhile, a significant contingent (26 percent) say they are “not sure” about whether extension programs have benefited them. Viewed from another angle, just under 20 percent of respondents agree with the statement that “Extension isn’t providing the kind of information that I need for my farm operation,” while over 46 percent disagree.

The degree of personal contact the client has with Extension appears to be closely tied to positive views about Extension. Personal contact is defined as having any of the contacts listed in Table 1 beyond merely reading an extension publication or article during the previous year. Among our dairy farm respondents, 67 percent reported having some kind of personal contact with Extension in 1999. Figure 6 shows a clear correlation between the number of times a farmer has consulted personally with someone from Extension and the perception that Extension programs have been beneficial. Having contacts through written materials does not appear to substitute for the valuable role of personal interaction with agents.

Second, dairy farmer satisfaction with Extension appears to vary according to the size of their farm. As herd sizes go up, farm operators are increasingly likely to report that Extension programs have been beneficial to their farm business (see Figure 7). A disproportionately large share of the dairy farmers who stated that they were “unsure” about whether they had benefited from Extension came from farms with smaller herd sizes.

Finally, the smaller the herd size, the more likely the operator was to agree with the
the statement that “Extension isn’t providing the kind of information that I need.” Again, it is unclear whether this is an indication that Extension programs are better tailored to meet the needs of larger operators or whether larger operators are more satisfied simply because they have higher information needs and seek out contact with Extension more frequently. In any case, operators with herd sizes over 100 report the highest levels of satisfaction with UW-Extension.

Conclusions

While most dairy farmers envision a strong role for publicly-funded agricultural research programs, a substantial number appear to be withholding their judgement. This lack of a clear consensus on the value of university research programs probably reflects both a lack of visibility on the part of UW research programs and some uncertainty about the direction or even the need for public research programs. This relatively large group of farmers that is “unsure” about the benefits of public research may constitute an important target for future needs assessment work by UW agricultural researchers.

In general, UW-Extension services are highly utilized by Wisconsin dairy farmers. The use of Extension, however, varies significantly by the client and by the size of the dairy farm. Within each herd size category, there are farmers who range from having no contact with Extension to having extensive contact with Extension. However, the operators of larger dairy farms appear to be utilizing and benefiting from Extension services to a greater degree than those with smaller farms. More research needs to be undertaken with operators of small and medium-sized farms to determine why they utilize Extension services at lower rates. Do Extension programs need to be reevaluated for their relevance to small and medium-sized producers? Are there new programs that might be seen as more helpful? Clearly, UW-Extension needs to take stock of whether this size disparity is related to program content, the accessibility of programs and agents, the willingness of clients to seek out information, or even preconceived notions about the nature of Extension programs and services.

Overall, UW-Extension is perceived as helpful by a majority of dairy farmers. However, our findings suggest that satisfaction with Extension is closely related to levels of personal contact with county extension agents, and that less direct forms of communication can not compensate for face to face contacts. In an era when county extension faculty are moving towards more specialized skills and multi-county areas of responsibility, it is increasingly difficult for agents to maintain personal relationships with large numbers of farmers. This suggests that UW-Extension has much to gain from maximizing opportunities for personal consultations between agents and farmers, even as agents become more specialized.