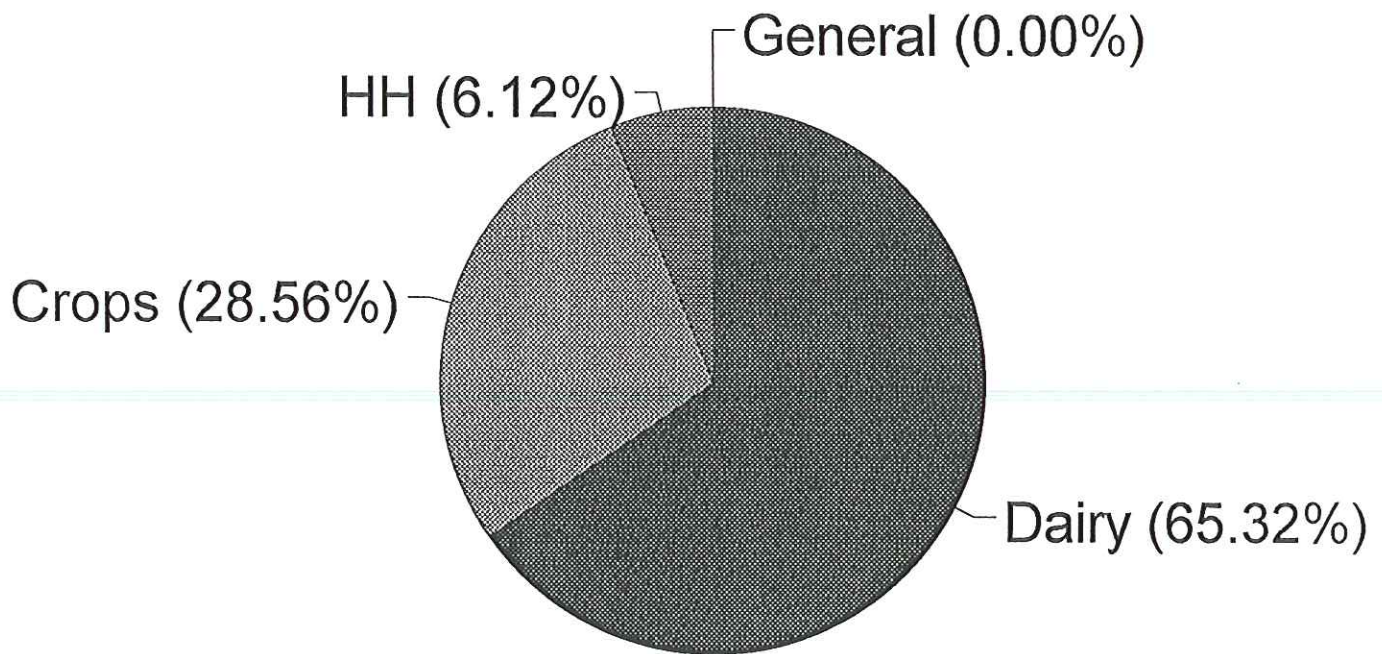


Graph 19:

Task Hours

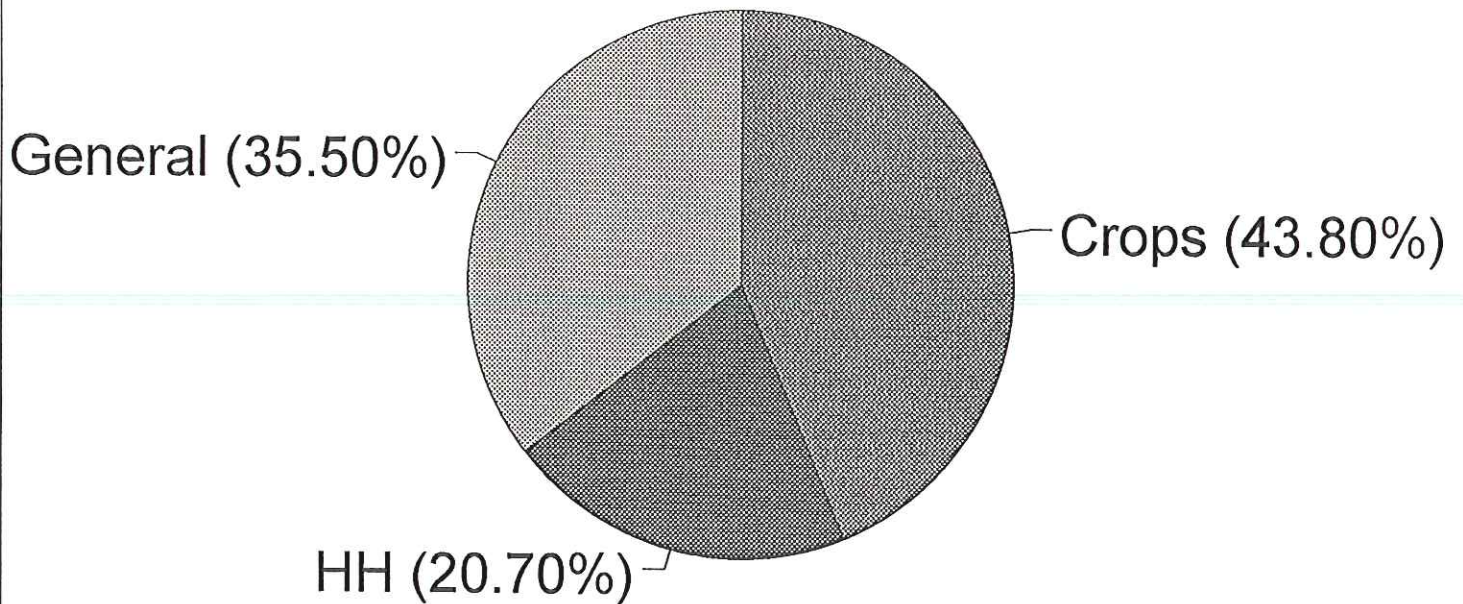
Jeanquart Kids



Graph 20:

Task Hours

Adonis-Kiehnau Farm

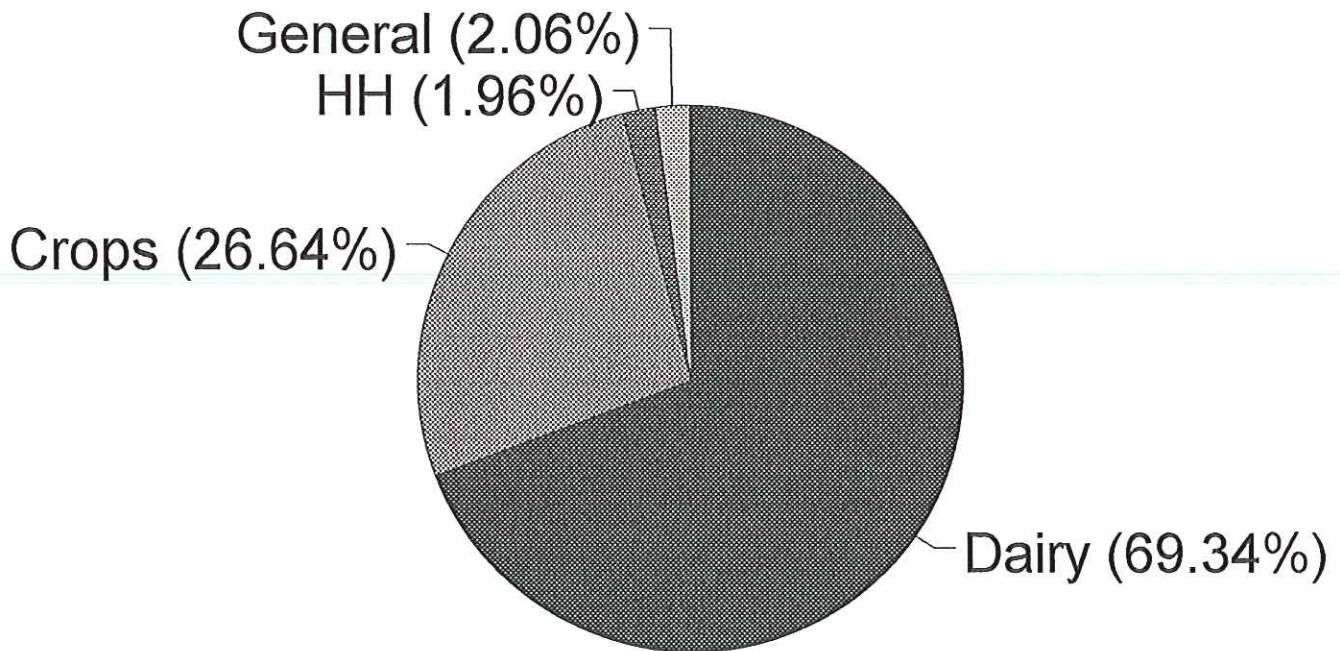


Graphs 21 and 22 show how hired labor is utilized on both farms. A majority of the labor hired is utilized in Dairy Tasks and secondly, Cropping Tasks.

Graph 21:

Task Hours

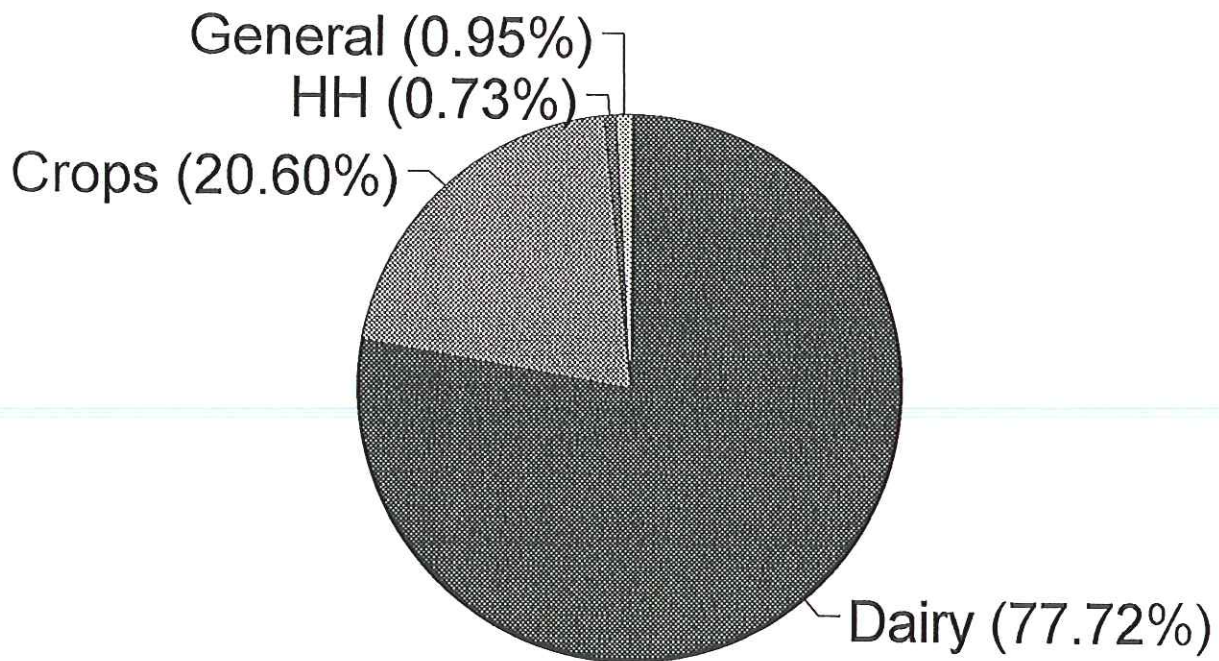
Darrin-Jeanquart Farm



Graph 22:

Task Hrs.

Steve-Hired Labor Kiehnau Farm



Conclusions and Recommendations

Conclusions and recommendations were reached and jointly discussed at a meeting between the two families, Dr. Stevenson and John Bobbe.

Conclusions:

1. The study of how time is spent on these two farms was beneficial for both families. It made them realize how labor intensive their farming operations are and how much time various tasks take.
2. Keeping the logs was time consuming and the hours logged for this task are probably underestimated in the actual data in Appendix B where it is listed in a separate task category "Project". The positive benefits of doing the study outweigh the time spent on keeping the logs.
3. Both families feel it would be beneficial for other farm families to keep track of how they spend their time in order to be able to look at how they run their farming operations and the time available for families, etc.
4. With the farm residence and the farming operation itself a part of the same complex, the tendency is to get into routines. With the large amount of hours involved it is easy to end up in the "same old rut", continuing to do things the same "old way".
5. The study helped identify the amount of time required to repair and maintain machinery on each farm. Ways of reducing the operating time of machinery may contribute to more labor available for other farm tasks while reducing expenses. The amount of time in Cropping Tasks used for machinery repair and maintenance was 10% and 13% respectively for the Jeanquart and Kiehnau farms.
6. Changes are going to be made in both farming operations as a result of the study. Changes include:

Jeanquart Farm: The study helped to identify cropping operations that may not be as productive due to weather conditions. In years with extremely wet soil conditions, rotary hoeing corn may not be the best use of labor. Substitution of cultivation or other tillage operations might be more labor efficient.

They will be experimenting with the use of intensive rotational grazing for their dairy herd in 1994.

Conclusions cont'd:

Kiehnau Farm: The study helped to identify additional rented acres that required a large amount of time (due to wet soil conditions) in Cropping Tasks. That acreage will not be rented again and acreage closer to the farm that will require less time to farm has been rented.

They will continue to concentrate on improving the intensive rotational grazing component of their farming operation.

7. It appears that families can make the mistake of viewing the farm as a place to live rather than treating it like a business. Viewing the farm as a business can change the perspective on how decisions regarding how labor is used for various tasks.

8. The study identified the fact that there is a lack of personal time for family members, especially husband and wife. Other labor tasks tend to crowd out the time for personal activities.

There is also a difference between "time being available" for certain activities or tasks and "actually taking the time". Both wives cited the example of hiring help for milking and husbands still going to the barn out of habit.

9. A number of advantages of intensive rotational grazing for dairy farm families were identified. They offer the potential combination of better use of available labor on the farm and improved farm profitability.

There would appear to be little labor savings in setting up the initial IRG system. In fact, the transition process maybe more labor intensive during the startup period. Once established, IRG offers some of the following identified advantages based on the Kiehnau's experience:

--IRG requires different types of tasks such as cow management skills versus mechanical ability to fix machinery.

--On the Kiehnau farm no equipment (such as silo unloaders) was run from May 10 to September 24. The cattle were still out on pasture until November 15 with only part of their feed coming from stored supplies from September to November.

--Less grain was fed, 28# per cow/day on an average when the herd is confined versus 15# per cow/day for IRG. Also less protein is fed, 15#/day in confinement versus 4.5#/day on pasture.

--There is less manure to mechanically spread, 3 loads all summer versus 1 load every 2-3 days when cattle are confined during the summer.

--Pasture data from the past year on the Kiehnau farm shows that the average protein content of the pastures was over 21% and the yields were 6-8 tons of hay equivalent per acre. This is double the Door County ASCS hay yields for mechanically harvested hay.

~~--The amount of feed that needs to be mechanically harvested and stored includes needing only 100 round bales to feed during the~~
9. Cont'd:

year versus over 300 bales when the cattle were confined.

--Cows are cleaner making milking easier.

--Having to harvest fewer acres mechanically should prolong the life of machinery and result in less time involved in machinery repairs.

--The types of tasks involved in IRG maybe less intense physically, making the work easier.

--Perhaps the most pivotal finding of the study, (Graph 9) shows that IRG requires the least amount of labor per crop acre harvested compared to corn, hay or small grains on the Kiehnau farm.

--There are some drawbacks to IRG including:

- *getting cows bred on time
- *adequately balancing the herd ration based on the present techniques for ration balancing for cattle on pasture
- *getting cows to consume proper amounts of minerals
- *time spent putting cows in and out of the barn
- *time spent training heifers to get into the routine of going in and out of the barn

Overall, the advantages to IRG seem to outweigh the disadvantages.

10. Both families agree that taking time off is important for vacations, family functions, etc. The problem is to find the time and the importance of adhering to a schedule.

Farm life has advantages and the rural values that still exist are important aspects.

11. It was easy to quantify the amounts of labor required for various tasks as a result of the study. What is more difficult to address are the quality issues. The study was able to focus on labor tasks that surround quality issues but did not quantify them.

The study did achieve the desired goals and can serve as a baseline for additional areas of study.

Recommendations:

1. Further followup on these two farms will occur in 1994 as this study continues. Each family will keep their logs for one week per month during the same 5 month period (May-September) to see if they are able to implement further changes that may contribute to an enhanced quality of life.

2. The amount of time spent on both farms doing Barn Chores, (tasks surrounding milking, feeding and caring for dairy cattle) indicates that further study of the labor and task requirements

of other types of dairying systems needs to be done. Do other types of systems offer more labor savings and can they better address quality of life issues? The 1994 continuation of this study will look at labor and task requirements on a farm using a seasonal milking system. Do other milking systems like New Zealand parlors and cattle handling methods lend themselves to different, less physically demanding types of labor and improved quality of life? What about low capital types of dairy systems for beginning farmers and the types of life styles they might lend themselves to?

3. Based on this study, the University of Wisconsin-Center for Integrated Agricultural Systems has made available some funding to attempt to organize a focus group on farm quality of life issues. The group will include Kevin and Sue Kiehnau and Ed and Kay Jeanquart plus a couple of additional farm families (husbands and wives). Dr. George Stevenson and John Bobbe will be involved as well as a trained facilitator/counselor. If it can be organized, the plan is to meet up to 5 times between January and April, 1994. The purpose will be to attempt to focus in on actual quality of life issues and family relationships in farming situations.

4. Large dairy herds (over 100 cows) with multi-family involvement have not been studied with regard to labor/task, inter-family relational and quality of life issues. Based on the Kiehnau-Jeanquart Study, the University of Wisconsin-Center for Integrated Agricultural Systems is in the process of exploring funding the study of a farm of this type as an addition to the 1994 Quality of Life Study.

III. Outreach

What methods did you use for telling others about 1) your project; 2) project events or activities; and 3) project results. How and to whom did you communicate this information? Be sure to include ~~details on how many people attended field days or demonstrations,~~ and how information was further disseminated by media covering any events. What plans do you have for further communicating your results. (Enclose in the addendum any press releases, news clippings, flyers, brochures or publications developed during this project.)

* Dr. Stevenson discussed the on-going project at the "Technical Workshop: Parallels in Dairy Grazing in New Zealand and the Midwest (August 25-26, 1993) held at the U.W. Arlington Research Station Events Facility. (See Appendix D for a notation of the project. Number attending the conference: 100.

* An article on the Kiehnau farm appeared in the statewide farm newspaper Agri-View. (See Appendix D.)

Further Project Dissemination:

--The project will be discussed at a session of the Sustainable Agriculture Institute sponsored by the Door County Environmental Council and the Northeast Wisconsin Sustainable Farmers Network. The Institute will be held in January and February, 1994 and is attended by farmers from Northeast Wisconsin.

--Two articles are being written for the Door County Advocate about the study and the farm families involved. They will possibly be published in late December, 1993 or early January, 1994.

--Plans are to be made to discuss the project results at the quarterly meeting of the USDA-SARE funded Intensive Rotational Grazing Project with the Wisconsin Rural Development Center, Mount Horeb and the University of Wisconsin-Madison. The meeting will be held in January, 1994.

--Planners of the 1994 Wisconsin Grazing Conference have indicated an interest in devoting a workshop session to discussion of the study results. The conference is scheduled for March 14-15, 1994.