BACKGROUND
Beginning in late July 2002, we conducted a survey about people’s personal and family calendaring habits. By the end of September, we had over 400 responses, which are summarized below. The survey was conducted to help inform our work in designing new technologies for families, motivated in part by our work on the InterLiving project. InterLiving is a 3 year, European Union-funded project where we work with distributed, multi-generational families as design partners to create new technologies (see http://www.cs.umd.edu/hcil/interliving for details).

The survey was administered from a web page (https://www.cs.umd.edu/users/hilary/survey/survey.htm), and participants were solicited via a “chain-mail” email approach. We began by sending a request to fill out a survey to our friends, families, and colleagues. We asked that they forward the request on to their friends, family and colleagues as well.

While we realize that this was an imperfect approach, we believed that the respondents would be representative of the users we are initially targeting in our research on family calendaring and coordination – individuals who are already making relatively heavy use of computers at home and/or work. The results seem to validate this assumption.

Many of our respondents likely come from the HCI community as the mailing went to our large lab mailing list. We may have some pollution in the data as a result of people in the same household (e.g. husband and wife) both filling out the survey. Despite these issues, the results we got were helpful in eliciting a number of important findings, namely that people rely on multiple calendars, many of which are still paper.

RESULTS
Demographics
Of the 401 responses, there was an even split between men and women, and a good cross-section of ages, except for those over age 60. More than half of the respondents were married, and about 80% lived in a household with at least two people. Unfortunately, we did not get as many households with children as we would have liked – only 28%. Not surprisingly, 70% of the respondents used a computer at least 30 hours per week.
Calendar Usage

Only 17% of respondents use only one calendar to record information. Given the heavy percentage of computer users, it is not surprising that many people use computers and PDAs for recording and gathering information, but paper-based calendars are also heavily utilized. Personal and work appointments and events are the most recorded items.

Sharing

The majority of calendar sharing takes place between people in the same household, or with work colleagues. These are also the people that respondents most wanted to share with in the future.
Problems
The following were the most common problems cited (at least 20 people mentioned them), in order from most to least frequent:

- Too many calendars to maintain, synchronize, and/or duplicate information on
- Unable to access from a different location
- Paper or electronic spaces too small to write in
- Compatibility issues with other software

Uncertain Events
The following were the most common ways of handling uncertain or tentative events (at least 50 people mentioned them), in order from most to least frequent:

- To do lists/notes/Post-It notes
- Make item visually distinct, using a question mark, pencil, or different color/font
- Guess day/time and manually or automatically move as necessary

At least 20 people also mentioned the following:

- Don't record it
- Record it somewhere else on the calendar, like a margin, evening, or Sunday
- Mark it with a tentative, free, or low priority label
- Set a reminder or alarm

Synchronization and Duplication
Out of 318 people who answered the question, only 53 reported they explicitly do not synchronize or duplicate information between calendars.

Maintenance of Family Calendar Information
Of the 270 people with at least 2 members in their household who answered this question:

- 119 have a single person who mostly maintains the family calendar information
- 151 have more than one person do this
- More than 90% of the "single maintainers" were women

ANALYSIS
Observations

- Most people use more than one calendar to record things
- Heavy computer users still rely on paper calendars
- Synchronization and duplication are important but hard
- Many people annotate a shared ‘family calendar’
- Computerized calendars are desirable but often incompatible with each other
- Sharing with close family/friends/colleagues is desirable
- Uncertain and tentative events are handled in a wide variety of ad-hoc ways

Suggested Solutions

- Better support for synchronizing and sharing calendars
- Better integration of paper
- Better tools for creating and viewing uncertain and tentative events