Garden Data Management Guide:

Overview: The basic functioning of this excel sheet is set up to formulate harvest dates for produce for the use of dining services based on planting dates throughout the year. This excel sheet is a working document to be utilized by the garden team as a tool to plan the garden timeline which is needed by dining services in advance. These planting dates are values which should be inserted by the user throughout the summer as crops are planted or planted according to a planting schedule planned in advance. Because there are often many plantings of one type of crop, several columns are offered to insert a planting date. Additionally the sheet calculates harvest quantity based on “feet planted” using a conversion factor of average yield per foot. Harvest types are categorized by continuous or bulk yield which would need to be designated by the user. Continuous harvests are those which can be harvested on a weekly basis with one planting in the beginning of the season (e.g. basil), while bulk harvests are harvests which one planting date corresponds to one harvest date (e.g. corn). These data are then linked to the dining services worksheet which provides them with relevant information such as harvest dates and quantity per harvest.

Garden management:

- Greenhouse and direct sow dates are reference dates that based on the first frost free date. These dates are not formatted to be used in any subsequent calculations, but simply a guide for the garden manager.
- Suggested days planting interval is based off of data individual to each plant, but again is a reference cell
- Seed starting is calculated by subtracting the days old when planted from the planting date. Days old when planted is the age of the plant when it is transferred to the garden. If directly sown into the garden then this value would equal zero.
- First transplant to garden is another reference cell individual to each plant. Some guides provide a suggested transplant date, which can be used to verify that the plant isn’t going outside early.
- “Days to maturity” is data input by the garden manager and is used to calculate harvest dates.
- The planting dates are dates to be inserted by the garden manager throughout the summer as plants are put into the ground.
- The next columns are used to calculate quantity. Number of feet planted is input by the garden manager, which is then converted to a yield per planting using a conversion factor of yield per foot.
- Following this crops are designated as continuous or not, and number of maximum weeks possible is a measure of continuous harvests if harvested through its entire season, while the next column is based off of when it was planted. These calculations are important for determining the total yield for a given type of produce.
- The next columns are the harvest dates based on planting date and days to maturity.
• Because continuous crop yield is calculated on a per week basis and is dependent on the first planting date, the first harvest date is included on the harvest schedule and subsequent harvest dates will be on a weekly basis for the duration of the crops total yield.
• The following sections are estimates of total quantity produced per planting. Column AP is true for each planting, however if designated as continuous this value is divided by total harvests.

Dining Services

• This section of the document is linked to the garden management harvest dates. However it is advised that if data is modified in the garden management portfolio care should be taken to make sure this properly updates in the Dining Services section by dragging down through rows A through N. If there is a better way to link these documents it is suggested that this be done, however this issue was not discovered until later and attempts at fixing this were not successful. A potential solution would be to hyperlink these documents together if possible.
• The following rows (P and greater) are to be used by dining services to keep track of what is available on a weekly basis, and log information about quantity and date picked up. This is intended to then be a useful guide for the future in determining how much of a certain crop should be planted.
• Because automatically sorting harvest dates into a weekly basis requires extremely complex logical functions, quantity available must be manually figured into the sheet at this point. It is recommended that this be considered in future revisions of this document, though we weren’t able to figure out how to do this at this point.

Overall this is a working tool, and it is expected to still need future revisions. We hope that someone take up this project, and work toward fixing any bugs that come about with implementation. Additionally all data provided should not be relied upon, these inputs were simply given to serve as an example, though whenever possible estimates were included based off of various online seed catalogs.

The main source used was