

# Experiences with Decision Support Systems

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# Recent experiences

- ▶ Mostly small decision aids
  - Wheat stocker budgeting tools
  - Graze out decision tools
- ▶ Last big project
  - Farm Bill Decision/Education Tool
    - All states/counties
    - Huge data sets
    - “Calvin Ball” Rules
      - Rules being made midstream
    - Another land grant’s tool had contradictory results

# Farm Bill passed end of January 2014

- ▶ Only legislation was available
  - Not the rules/regulations
    - Most complex farm bill to date
  - USDA was working with two nationally-funded universities
- ▶ Our sponsor called
  - The money is coming
  - We need your tool available now



# Data issues

- ▶ **USDA FSA and RMA**
  - Released data to public slowly
  - Hindered development and testing
- ▶ **When data were released, not always in same format as earlier data**
- ▶ **Data for all counties, program crops, and states**

# Development environment

## VBA for Excel Pros

- ▶ Handled file operations for me
- ▶ Could easily manipulate data within the environment
  - Did not need to import or can formatting
- ▶ Allowed me to develop menus etc without needing programmers
  - Too urgent to wait on “pros”
  - Too many updates and changes on the fly, needed in-house capability
  - I could program all calculations without translating
  - Work nights and weekends
- ▶ Most end-users were familiar with MS Excel

# Development environment

## VBA for Excel Cons

- ▶ Not Mac (or other operating system) compatible because of macros
- ▶ Crashed on Excel-clone software
- ▶ Had a few very angry emails demanding that we release versions compatible with nonstandard operating systems or spreadsheets
- ▶ I had to do all the programming 1600+ hours

# Results

- ▶ 28,000 documented end-users
- ▶ 1000s more assisted by Cooperative Extension Educators/Agents, crop insurance reps, County FSA offices (the pc term is undocumented users)
- ▶ Demonstrated economic impact of \$13 billion
- ▶ Sponsor (USDA Southern Risk Management Education Center) viewed as huge success
  - Want to partner on next farm bill
  - I hope to be fired, resigned, or retired by then



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