

Beginning Acreage Data in POLYSYS

Chad Hellwinckel

We begin by using estimates of base county acreage in crops from a mix of both NASS and CDL, then we adjust county crop acreage to equal the projected national totals of the USDA Baseline.

- 1) Base county acreage. We use NASS data, with CDL filling in the holes.
 - a. If USDA NASS data exist for a crop category, we use NASS planted acreage estimates. NASS data is our preference because it also has estimates on HARVESTED acreage and YIELDS.
 - b. If USDA NASS data are ZERO for a county, we use CDL acreage if available. This fills in many areas where NASS crop acreage does not exist.
 - i. For example in Iowa NASS does not collect data on wheat, even though there is considerable wheat planted. NASS does not report cropland data in the north east. Hay acreage is missing from NASS in many states.
 - c. Pastureland and Idleland – we use only CDL – there is no NASS data on these categories. There is also no need for HARVESTED acreage data on either. Pastureland and idleland estimates of CDL were very similar to census data estimates. Use of CDL is preferred because it is more recent and can be used better for mapping purposes (ORNL request).
- 2) Yields and harvested acreage:
 - a. In counties where CDL acreage is used (and therefore there is not harvested acreage of yield data), we use the NASS average % harvested and yield for the 'polysys farm resource region' for that crop. If no NASS data exist for the PFRR for that crop, then the national average % harvested and yield are used.
- 3) POLYSYS adjustment
 - a. If in a particular year of USDA baseline projections, the cropland estimate for a crop is LESS than the BASE acreage (from part 1 above), then POLYSYS removes acreage from the crop into IDLELAND. Removal is done at on a weighted scale at the county level.
 - b. If in a particular year of USDA baseline projections, the cropland estimate for a crop is MORE than the BASE acreage (form part 1 above), then POLYSYS adds acreage to the crop from IDLELAND on a weighted scale at the county level. IF there is not enough idleland in a county, then no more is added and the acreage is added to counties (proportionally) where idleland still exists.