

# 2009 Crop Residue Management Transect

Natural Resources  
Conservation Service  
and  
Conservation Technology  
Information Center

# Transect Procedure

- Simplified for 2009
- Targeted to states/counties where the procedure fits
  - Counties with  $> 100,000$  acres of cropland
  - High cropland density
  - Grid road system

# Transect Procedure

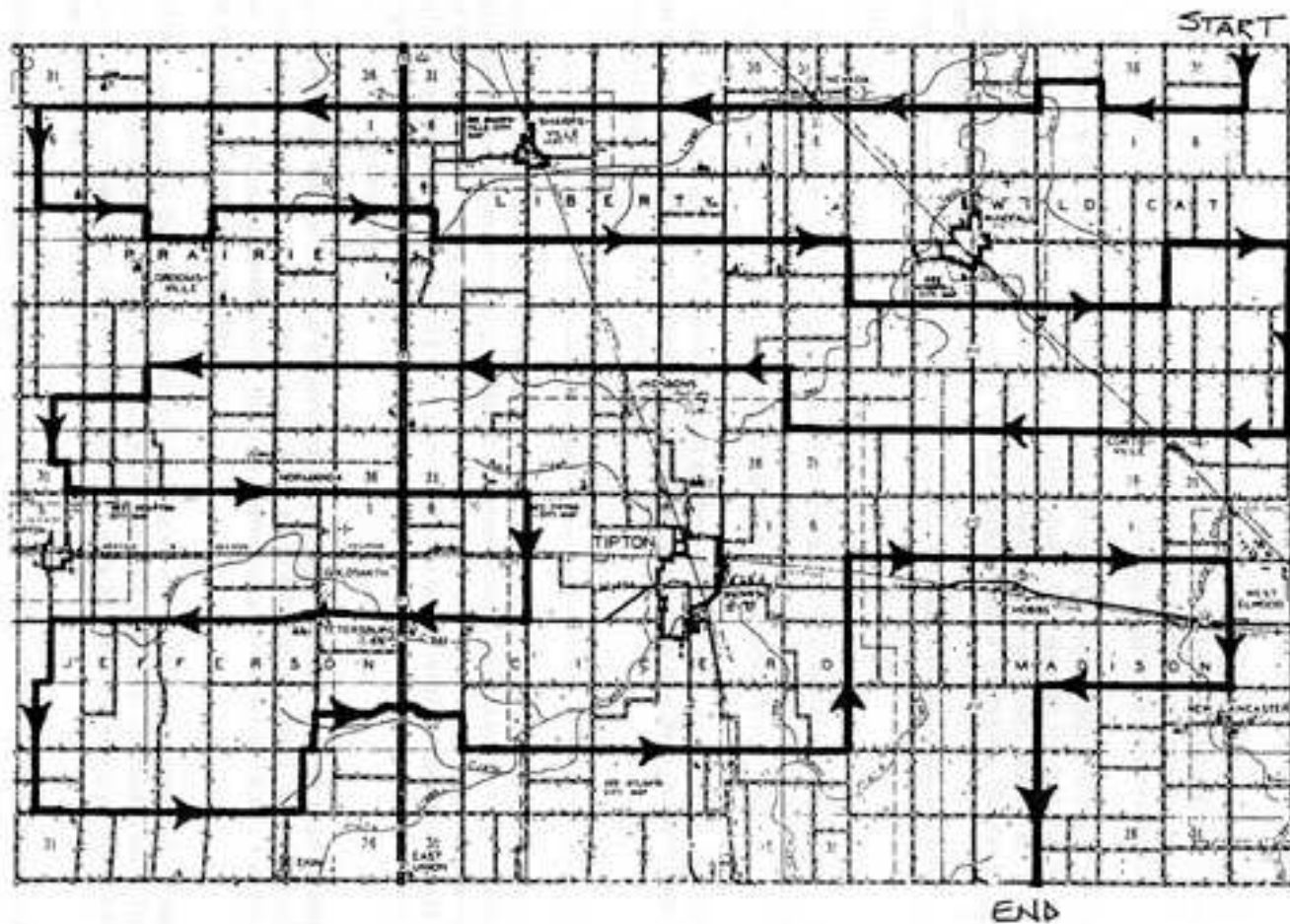
- View 2008 report for your county at [www.crmsurvey.org](http://www.crmsurvey.org)
- Password is county, state name
- Login is FIPS county code
- Select crops from list for transect procedure

# Establishing the Route

- If transect was done in 2008 use same route
- Route should be drawn on county highway map and should involve areas of the county that are predominately cropland
  - Avoid areas of the county that are predominately forest, range, or urban
- Route should be approximately 110 miles long

# Transect Map

Sample Route



# Establishing the Survey Data and Team

- Transect date should be after a majority of main crops have been planted but before the crop canopy closes or first row cultivation takes place
- This allows for easy “windshield observations”
- Need to be flexible
  - May need to spend one day doing Northern half of county and regroup to do Southern half 10 days later if rain delayed planting

# Establishing the Survey Data and Team

- Team may be 2-4 individuals
  - Driver, navigator, data recorder, observer
- Involve the local conservation partnership
- At least one must be very familiar with estimating residue
- Opportunity to educate and work with local conservation partnership

# Collecting the Survey Data

- Only data to be collected is tillage type/residue level for each crop
- Need data from approximately 460 fields (regardless of the size of the county)
- Collect field information from both the left and right side of the road

# Collecting the Survey Data

- Distance between stops will depend on the size of the county and cropland density
  - 1/2 miles stops for counties with <300,000 cropland acres
  - 1 mile intervals for counties between 300,000 acres and 450,000 cropland acres
  - 1.5 to 2.0 mile intervals for counties greater than 450,000 cropland acres

# Collecting the Survey Data

- Interval rules
  - If data point is a cropland field but is not planted to a crop (hayland, CRP, etc), note it as unknown for tillage type
  - If a cropland point is not observed on one side of the road (subdivision, farmstead, pasture), record NA for that field

# Collecting the Survey Data

- Interval rules
  - Only record data for fields that tillage type/residue level is obvious (don't walk into the field to try and determine residue level if the crop is too tall or it was a fall seeded crop)
  - If no cropland is encountered on either side of the road, continue driving until cropland is observed on at least one side, record and data and then proceed

# Collecting the Survey Data

- Start transect by having transect team measure residue from several fields to calibrate visual estimates
- Actual measurements should only be needed borderline cases
- Never look at end rows
- Recalibrate visual estimates periodically or if there is a major change in soil type

# Collecting the Survey Data

- Place a “tick” mark in the appropriate crop-tillage/residue columns for each field recorded on the Transect Data Collection Form
  - Place tick marks in groups of 5 to make addition easier



# Crop Acreage and Percent Calculation

- Sum the number of tick marks for each crop/tillage category
- Sum the number of tick marks for each crop
- Divide the sum of each tillage category by the total number for the crop – this will give you the percentage for each tillage system
- This completes the transect portion and the worksheet should be saved until reporting in August

# Reporting Acres for Crop/Tillage System

- Obtain best information for acres of each crop planted in your county for the 2009 crop year (FSA farmer certification in August would be a good source)
- Record acres planted for each crop on the CTIC CRM web site [www.crmsurvey.org](http://www.crmsurvey.org)

# Reporting Acres for Crop/Tillage System

- Local conservation partnership should help estimate acres of crop/tillage system for those crops not included in the transect
  - Fall seeded crops is spring transect is conducted
  - Double crop
  - Other crops that is was not possible to determine tillage system during the transect

# Reporting Acres for Crop/Tillage System

- Multiply percent for each tillage system from transect times the planted acres and enter for 2009 crop year
  - The program will give an error message if the sum of all tillage categories does not equal the number of acres planted for each crop
- Editing results
  - Use local knowledge to fill in gaps or add information that was missed during the transect

# Reporting Acres for Crop/Tillage System

- Other items to record
  - CRP acres
  - Fallow acres
  - Newly established permanent pasture
- New (from 2004) -Total acres in the county planted no-till into a cover crop