

# **Ben Weinheimer**

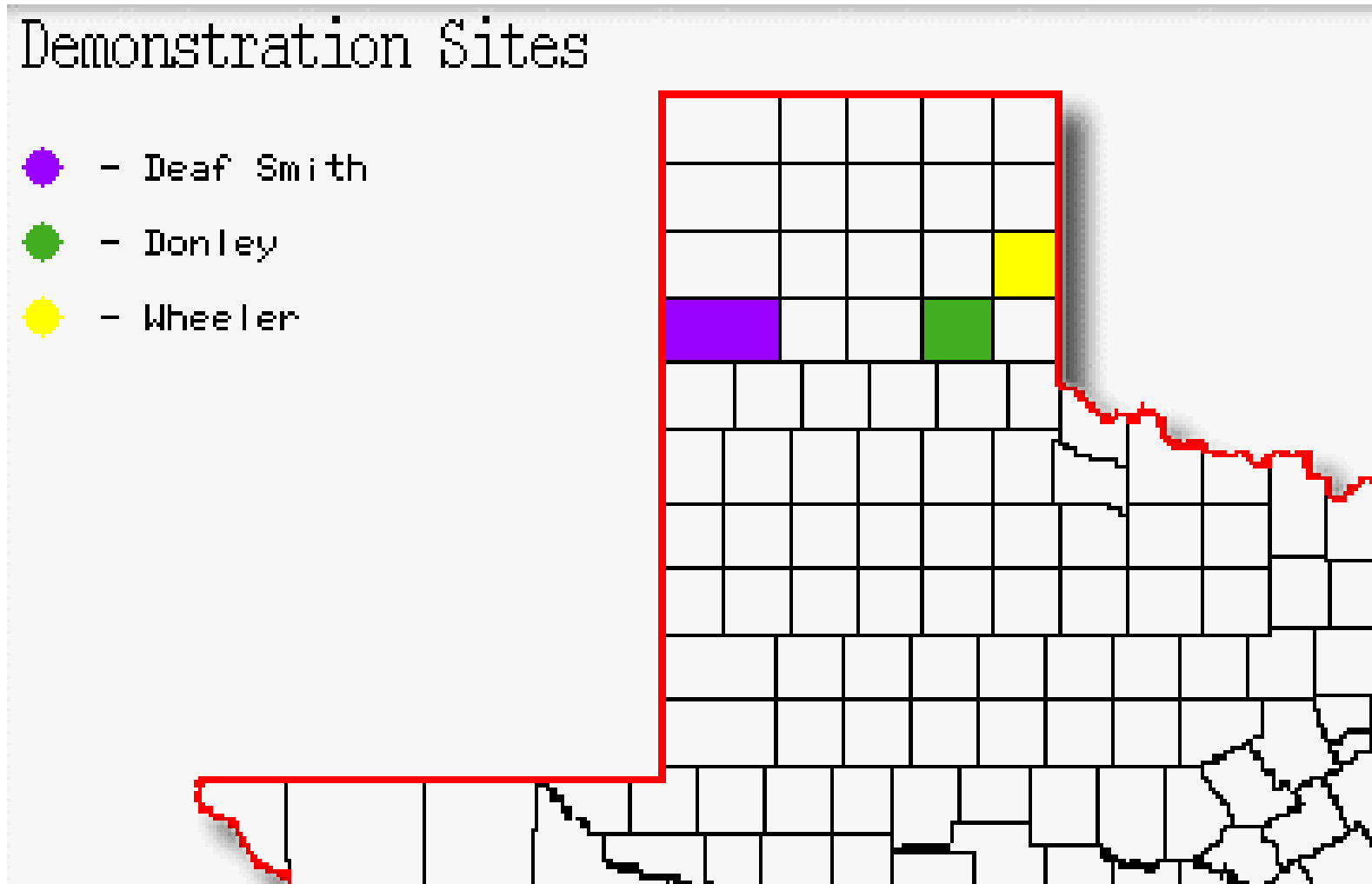
## **Texas Cattle Feeders Association**

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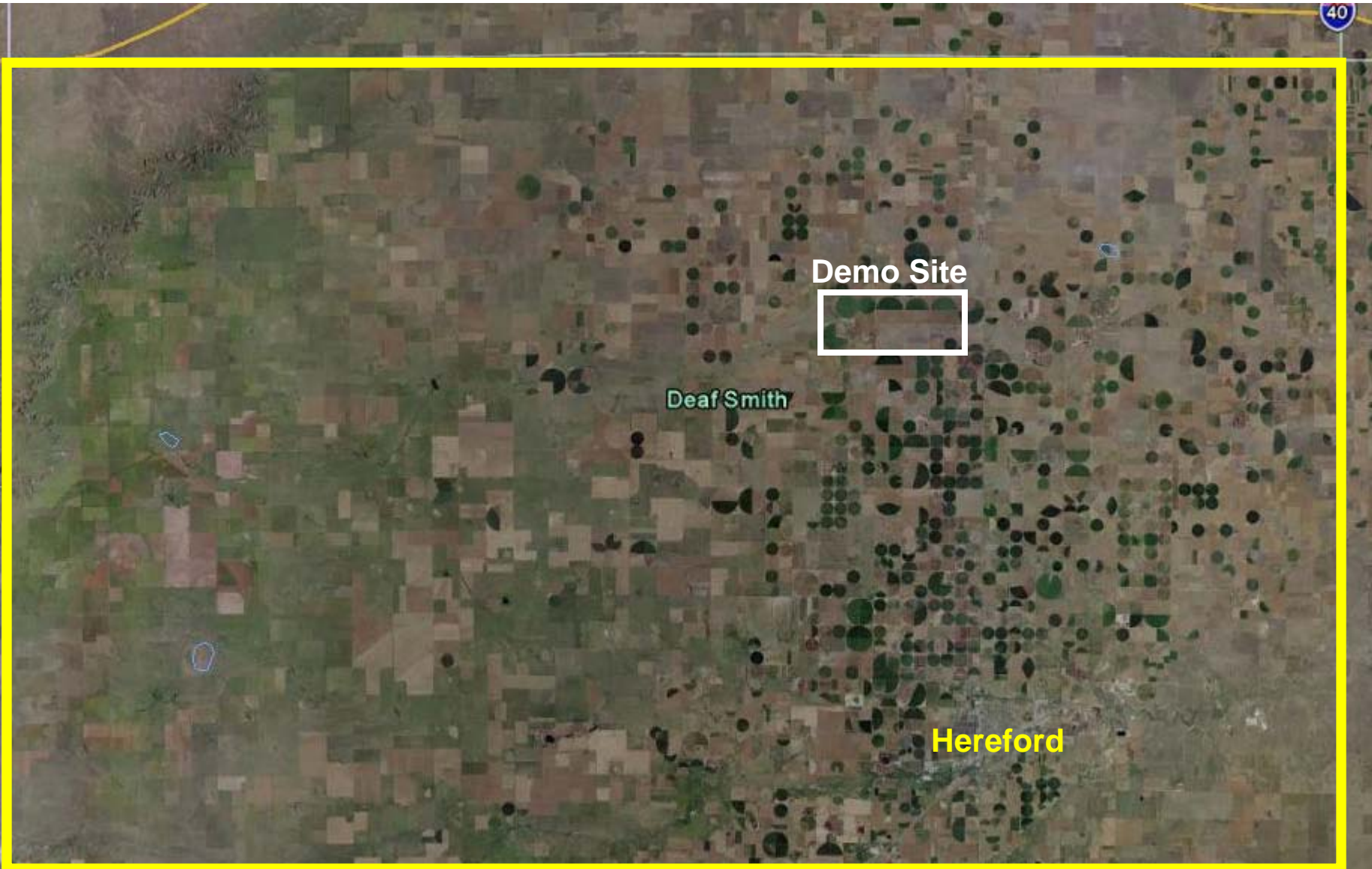
- **Multiple locations**
- **Soil series**
- **Crop types**
- **Tillage practices**
- **Manure & compost**
- **Type of incorporation**
- **Fall vs. spring appl.**
- **Buffer strips**

# Demonstration Sites

## Deaf Smith, Donley and Wheeler Counties



# Deaf Smith County

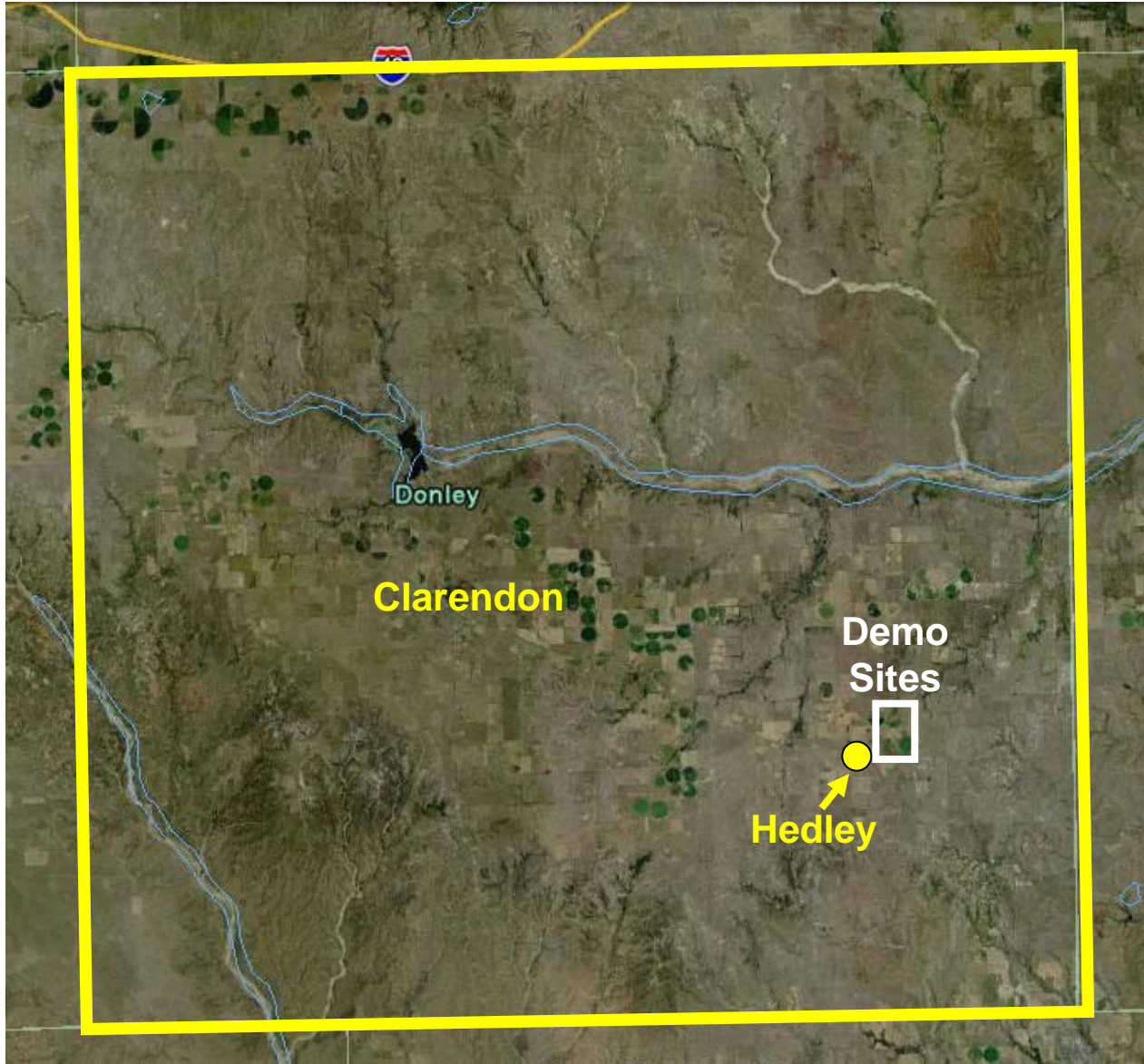


# **Deaf Smith County**

## **Soil Sampling (fields, sub-areas, & down-gradient)**

- **No. of fields:** 5
- **Irrigation:** Center pivots
- **Soil types:** Pullman clay loam
- **Type of flow:** Sheet
- **Crops:** Corn, cotton, wheat hay, sorghum silage
- **Tillage:** Minimum / Strip tillage / DMI
- **Fertilizer:** Manure and commercial
- **Time of appl.:** Fall and winter

# Donley County



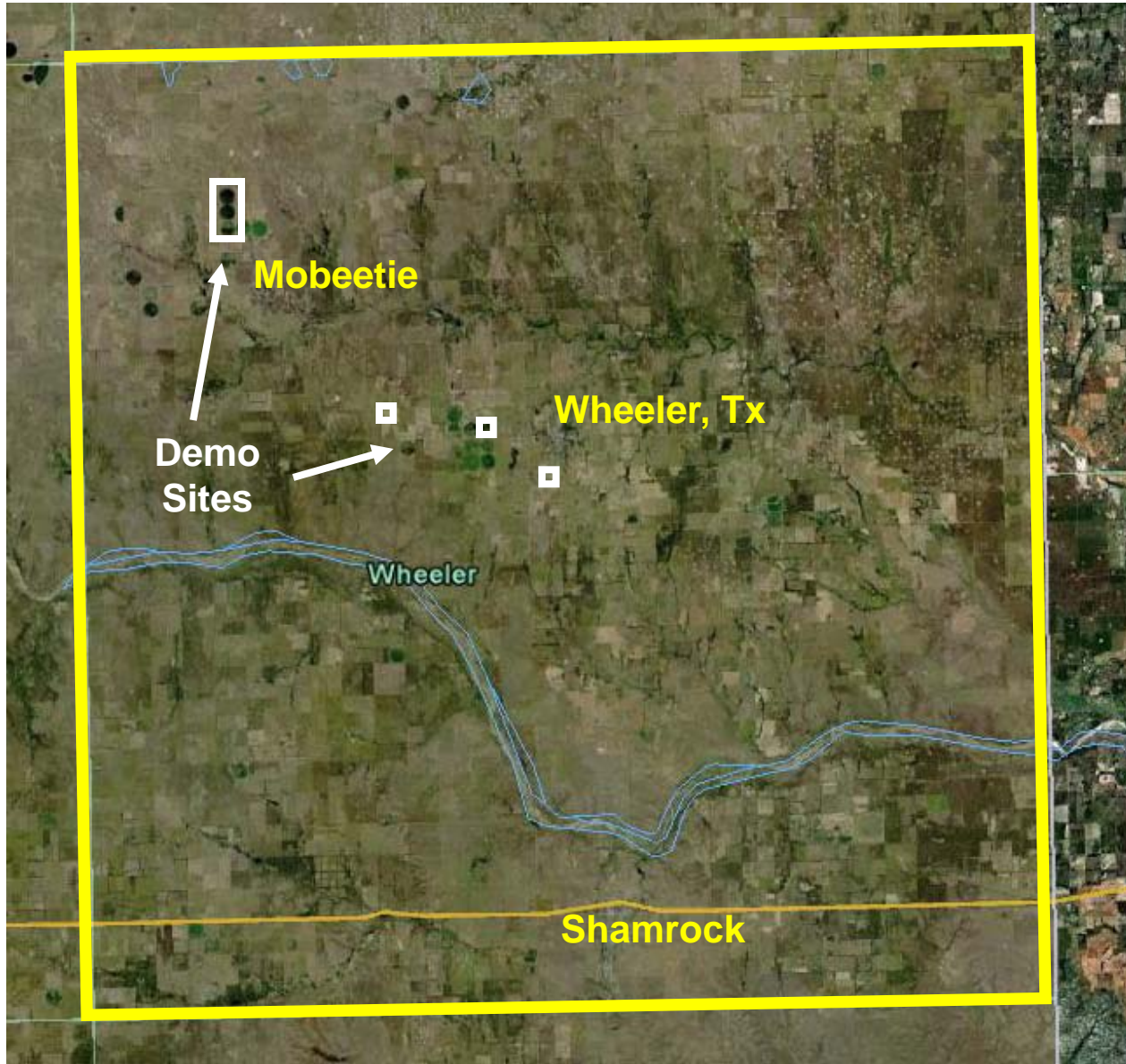
# Donley County

## Soil Sampling (fields, sub-areas, & down-gradient)

- **No. of fields:** 3
- **Irrigation:** Center pivots
- **Soil types:** Veal fine sandy loam
- **Type of flow:** Channel and sheet
- **Crops:** Cotton, peanuts, wheat
- **Tillage:** Minimum tillage
- **Fertilizer:** Compost and commercial
- **Time of appl.:** Winter



# Wheeler County



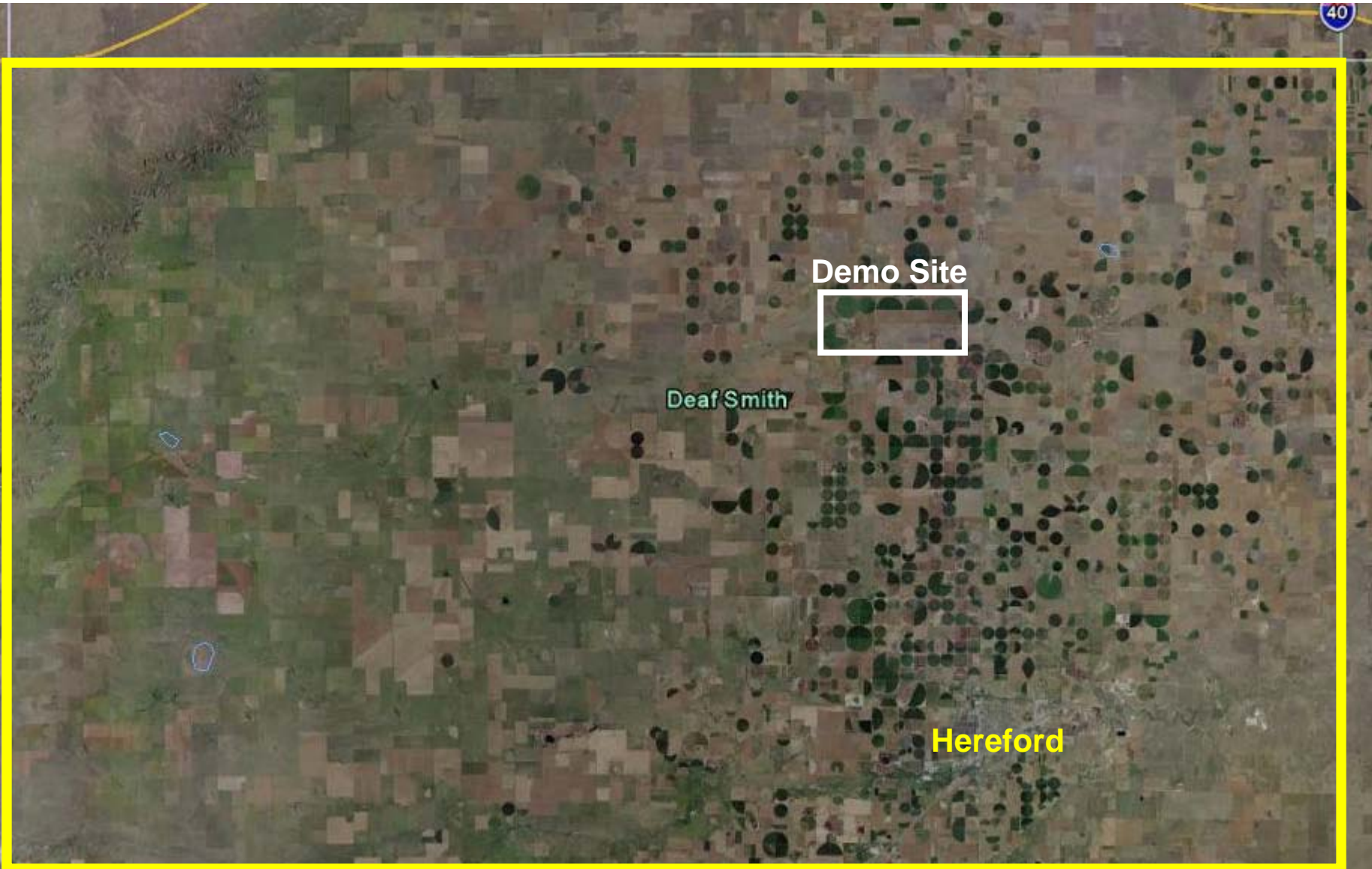
# Wheeler County

## Soil Sampling (fields, sub-areas, & down-gradient)

- **No. of fields:** 6
- **Irrigation:** Center pivots
- **Soil types:** Devol loamy fine sand and Mobeetie fine sandy loam
- **Type of flow:** Channel
- **Crops:** Corn, corn silage, cotton, wheat, triticale silage, peanuts
- **Tillage:** Minimum / single pass disk
- **Fertilizer:** Manure, compost and commercial
- **Time of appl.:** Early spring



# Deaf Smith County



# Deaf Smith County

Water Quality

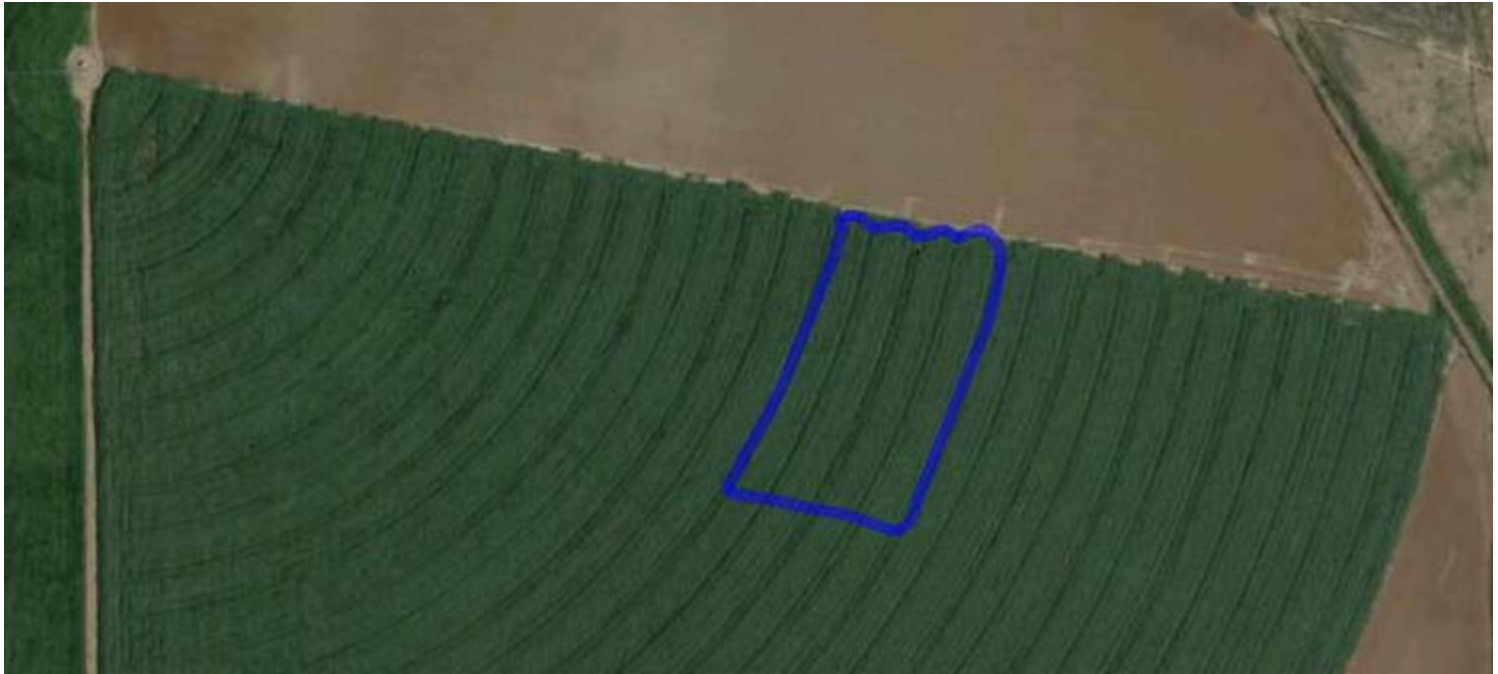
Runoff Plots



# Deaf Smith County

Water Quality

Runoff Plots





# Deaf Smith County





# Deaf Smith County





# Deaf Smith County



Photo courtesy of Dr. Paul DeLaune (from previous project). For this project, flumes and samplers will be installed in Jan 2011.

# Deaf Smith County

## Water Quality Runoff Plots

- **No. of plots:** 4
- **Size:** 1 acre each
- **Irrigation:** Center pivot
- **Soil type:** Pullman clay loam
- **Type of flow:** Bermed / concentrated
- **Samplers:** Automatic, flow-wtd. avg. conc.
- **Tillage:** Minimum / Strip tillage / DMI
- **Time of appl.:** Fall and winter

# Deaf Smith County

## Water Quality Runoff Plots

- **Treatments:**     **10 tons/acre manure every year**  
                          **30 tons/acre 1<sup>st</sup> year only**  
                          **2 tons/acre compost ever year**  
                          **Commercial fertilizer (farmer)**