

The Soil Moisture Index (SMI)

Eric Hunt

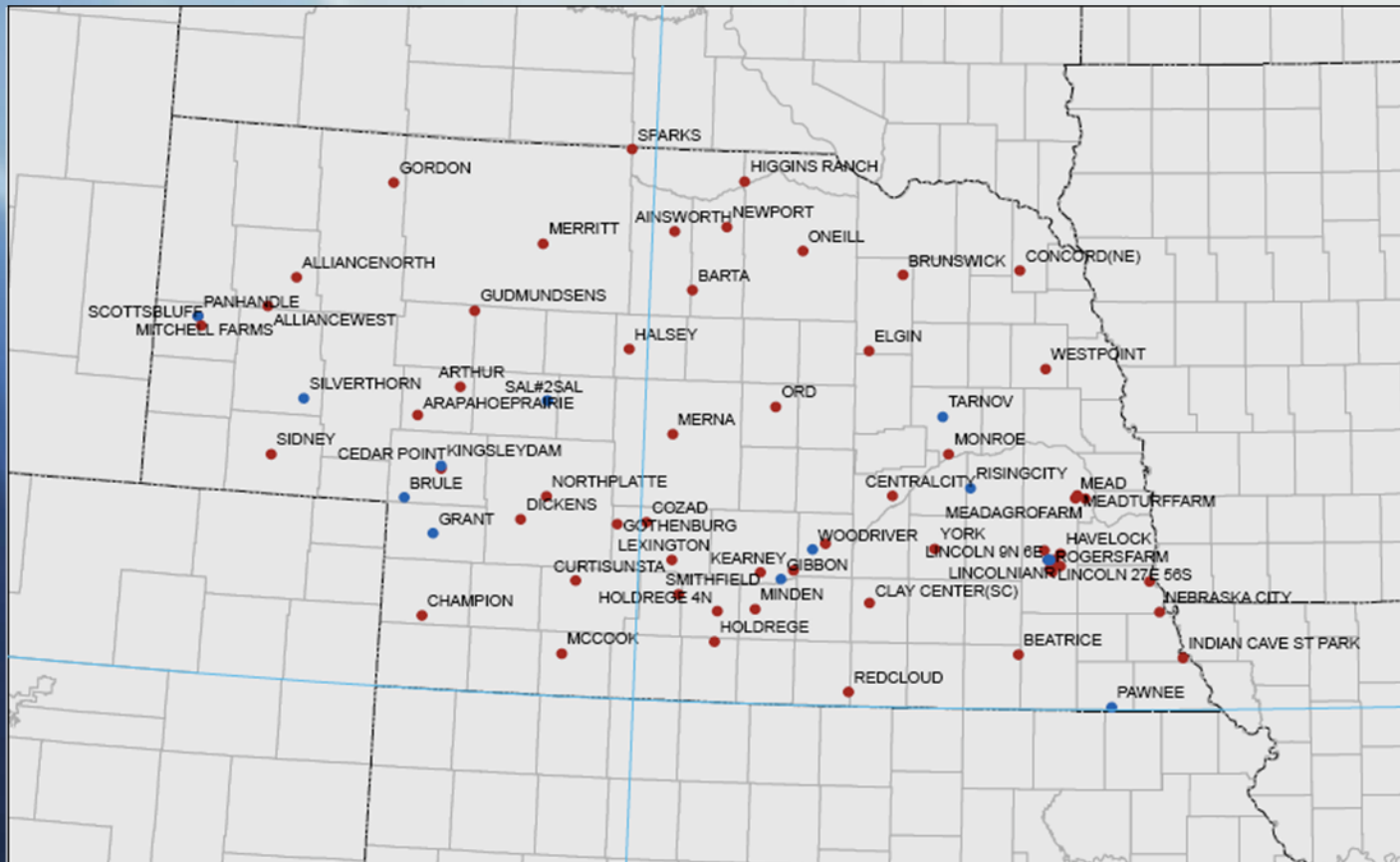
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How the SMI works

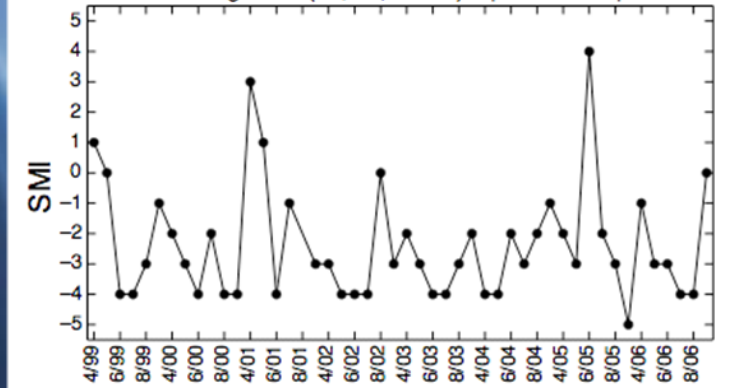
- Based on two physical terms
 - Field capacity
 - Wilting point
- Field capacity and wilting point were determined from field data
- SMI ranges from 5 to -5
 - 5 represents a soil at field capacity
 - -5 represents a soil at wilting point
 - 0 represents neutral conditions

AWDN Sites in Nebraska

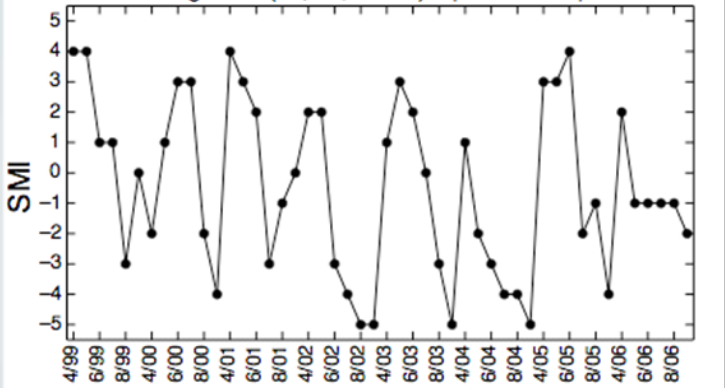


Analysis of 1999-2006 Growing Seasons

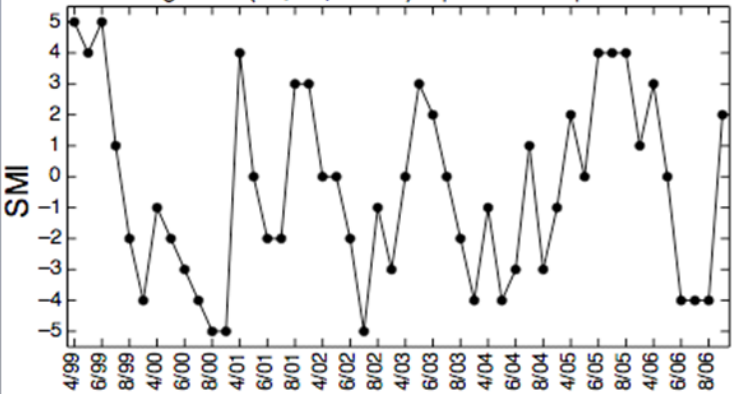
Mitchell Farms Average SMI (10, 25, 50 cm): April 1999-September 2006



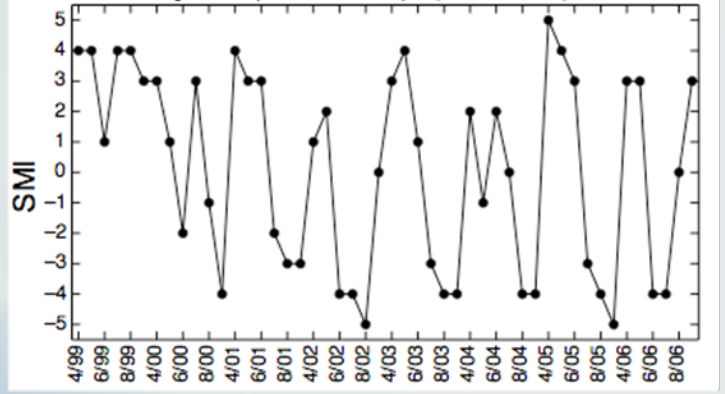
Ainsworth Average SMI (10, 25, 50 cm): April 1999-September 2006



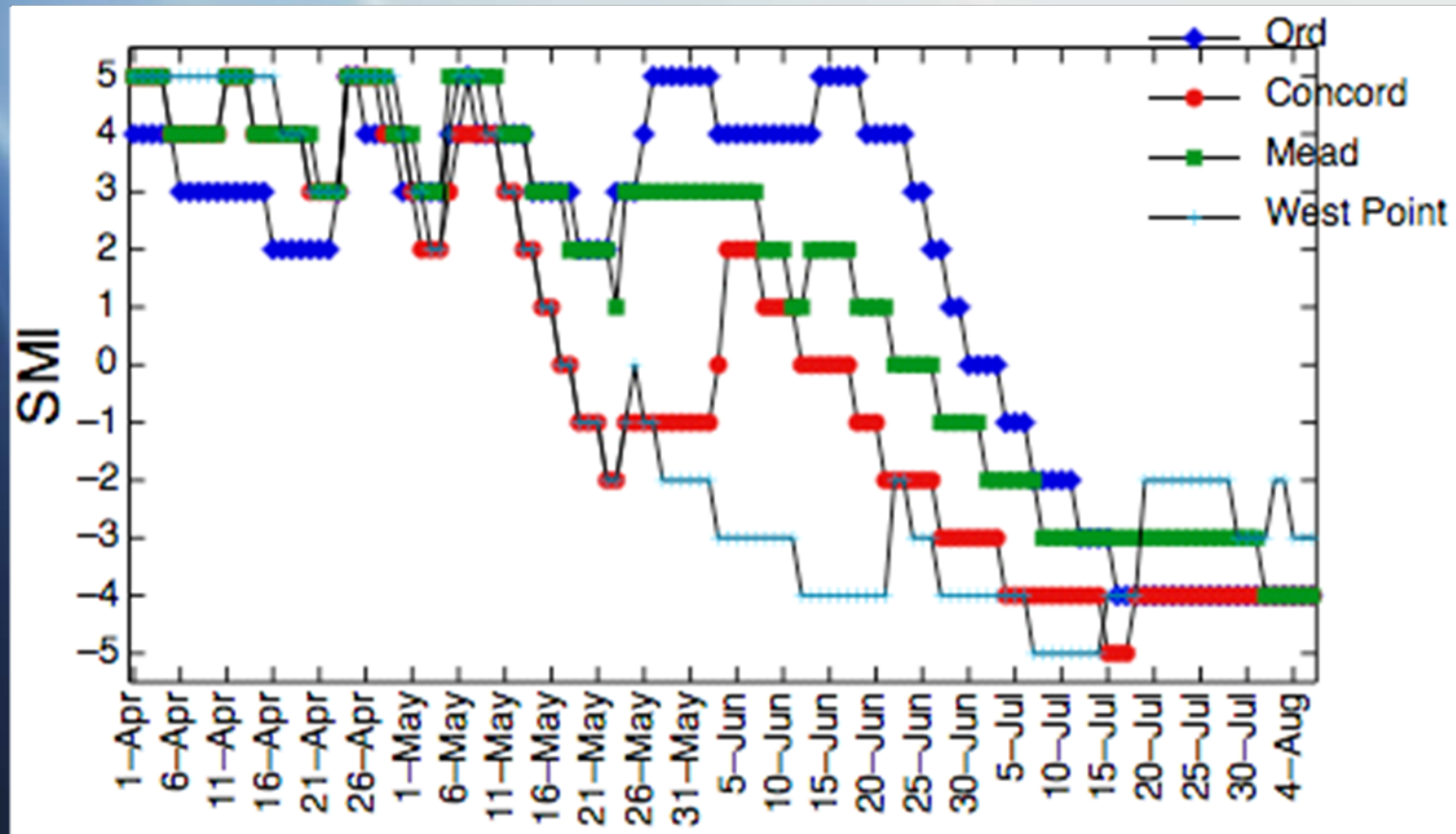
Ord Average SMI (10, 25, 50 cm): April 1999-September 2006



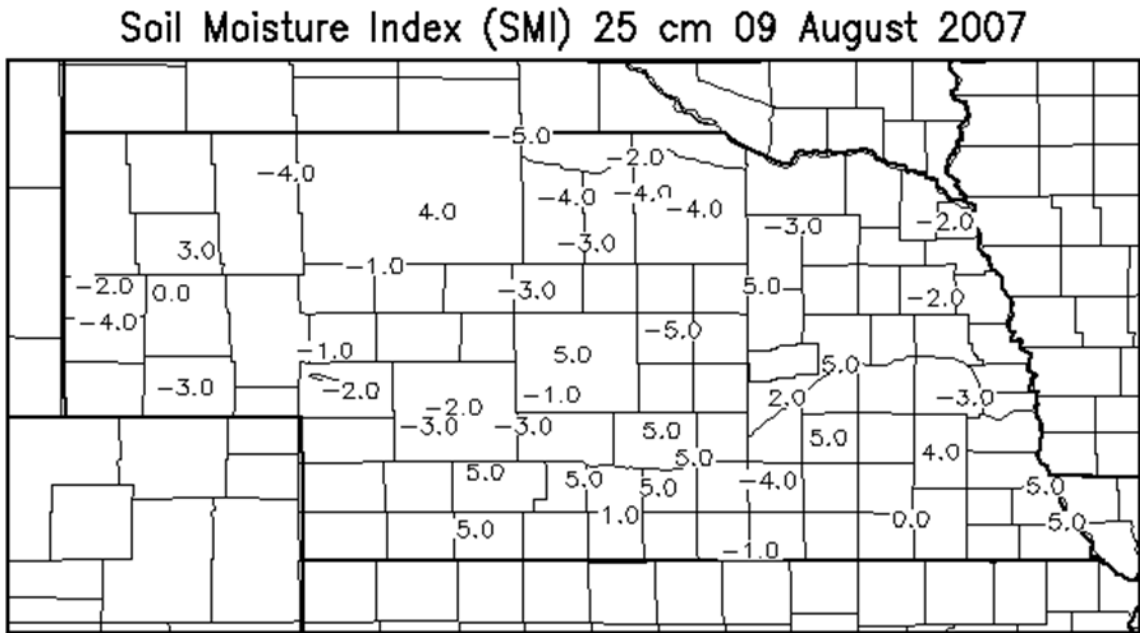
Mead Average SMI (10, 25, 50 cm): April 1999-September 2006



2007 Flash Drought (?)



SMI map





Questions??