

## **Western Regional 'Soil Physics' Technical Committee History**

The 'Soil Physics' Western Regional Technical Committee was approved in 1949 after passage of the Federal Regional and Marketing Act of 1946. Only W-6 (plant genetics) established in 1947 has functioned longer. Key early soil physicists in the W-9 committee were Sterling A. Taylor (Utah State) and Walter Gardner (Washington State). The evolution of the W-Soil Physics Technical Committees and their project titles are summarized in the following.

W-9 (1949-1954) **Irrigation and Soil Management Studies including Drainage, Salinity and Fertilization.**  
W-29 (1954-1959) **Soil-Water-Plant Relationships under Irrigation.** (*Nielsen joined W-29 in 1958*)  
W-68 (1959-1964) **Water Movement in Soil.**  
W-68 (1964-1969) **Prediction of Water Movement in Soils of Arid and Semi-Arid Regions.**  
W-68 (1969-1974) **Measurement, Prediction and Control of Soil Water Movement in Arid and Semi-Arid Soils.**  
W-68 (1974-1979) **Soil Water and Its Management in the Field.**  
W-155 (1979-1984) **Soil Water and Properties, Spatial Variability and Implications in Soil Management.**  
W-155 (1984-1989) **Characterization and Management of Soil Water and Solutes in Field Soils.**  
W-155 (1989-1994) **Characterization and Management of Soil Water and Solutes in Field Soils.**  
W-188 (1994-1999) **Improved Characterization and Quantification of Flow and Transport Processes in Soils.**  
W-188 (1999-2004) **Characterization of Flow and Transport Processes in Soils at Different Scales.**  
W-1188 (2004-2009) **Characterizing Mass and Energy Transport at Different Scales.**  
W-2188 (2009-2014) **Mass and Energy Transport at Different Vadose Zone Scales.**

### **The following are Unique Achievements of the W-Soil Physics Committee**

1. Because of its voluminous peer-reviewed publication record of innovative productivity that continues to the present, it is recognized as the preeminent soil physics research group in the world.
2. It provided a venue and a unanimously accepted policy for soil physicists and their students to present new research results with a full discussion before, and not after a previous presentation at an annual meeting of a national or international society. It was the norm to present something brand new and different. It was better to share a new idea even before completing a theoretical or experimental proof than to keep it a secret and only later realize that it was worthless or already done by somebody else.
3. *Soil Water* was the first book written and published by any regional research committee within the US to document its regional research achievements in addition to describing them in each annual report to the USDA. The book was dedicated in memory of Sterling A. Taylor, the first soil physicist of the Western Technical Research Committee in soil science and a member of every technical committee on soil physics in the western region.
4. It encouraged and helped a generation of previous students who received their Ph.D. in soil physics in western US to start the first Southern Regional Soil Physics Committee S-124. It also arranged a joint meeting between S-124 and the western committee in Tucson.
5. It introduced to the USDA the concept of a Regional Coordinating Committee with only travel funds provided to attend their own annual meeting (no additional research or extension funds were allocated) - an idea soon adopted and still a policy extended today under the name of a Multistate Research Coordinating Committee.
6. When USDA forbade regional committees to meet in Hawaii, the W-68 regional soil physics research committee was the first to receive permission to meet in Hawaii based on its academic agenda and its financial analysis.
7. When denied the status of an Interregional Committee for the entire US to allow those from other regions to join our committee, W-68 was the first regional committee in the US to have members approved from other regions of the US. Today, Multistate Technical Research Committees allow membership from any of the US states, territories and possessions.

Compiled by Donald R. Nielsen, January 14, 2010.