

## **Lowdermilk, Walter Clay** <sup>[1]</sup>

### **Lowdermilk, Walter Clay**

by J. Douglas Helms, 1991

**1 July 1888–6 May 1974**

Walter Clay Lowdermilk, soil conservationist, was born in Liberty, Randolph County <sup>[2]</sup>, the son of Henry Clay and Helen Vashti Lawrence Lowdermilk. In his youth the family moved to Missouri, then to Oklahoma, where he spent much of his childhood, and eventually to Arizona. He attended Park College Academy in Missouri and the University of Arizona (1910–12). Awarded a Rhodes Scholarship, he spent three years at Oxford University from which he received B.A. (1914) and M.A. (1915) degrees. In the summers he studied forestry in Germany and also served in Europe on Herbert Hoover's Belgian Relief Commission.

Returning home in 1915, Lowdermilk became a ranger for the U.S. Forest Service <sup>[3]</sup> in the Southwest where he developed an interest in erosion on the livestock ranges. Following service during World War I <sup>[4]</sup> as the timber acquisitions officer, he returned to the Forest Service as the regional research officer in Montana. His budding career as a forester was changed in 1922 with his marriage to Inez Marks, from Arizona, with whom he had corresponded while abroad. A devout Methodist <sup>[5]</sup> she was a graduate of the University of Southern California and had served as a missionary in China from 1916 to 1921. After their marriage they went to China, where Lowdermilk taught and engaged in research in forestry and famine prevention at the American Union University, Nanking. Visiting various sections of China, he focused on the problems of erosion and drainage. He and his Chinese associates compared runoff and erosion on the bared hillsides to the ancient, and protected, temple forests. At this time, his scientific articles on his experiments and resulting recommendations for soil conservation began to bring him international recognition.

Escaping the Communist uprising of 24 Mar. 1927, the Lowdermilks returned to the United States, and he again entered the Forest Service, continuing his study of erosion and streamflow in California. In 1929 he completed his Ph.D. at the University of California School of Forestry, with minors in soil science and geology. Following the funding of a federal program in 1930 to establish erosion experimental stations, Lowdermilk designed and supervised a station in California to study forest hydrology. In 1933 he became assistant chief of the Soil Erosion Service, a temporary agency. When the Soil Conservation Service was created in 1935, Lowdermilk was appointed its assistant chief. In 1938 and 1939 he was in Europe studying soil conservation practices. The results of some of his research appeared in abbreviated form in a U.S. Department of Agriculture <sup>[6]</sup> pamphlet, *Conquest of the Land through 7,000 Years* <sup>[7]</sup> of which over a million copies were distributed in the department's educational efforts.

Lowdermilk also toured the Middle East and wrote *Palestine: Land of Promise* <sup>[8]</sup> in which he advocated sound conservation measures to enable the land once again to support a large population. In time he also worked in the new state of Israel. During 1942–43, at the request of the Chinese government, Lowdermilk and a staff of eight Chinese specialists traveled nearly 7,000 miles to the Yellow River drainage basin in northwestern China. There they looked for indigenous soil conserving methods of farming, meanwhile setting up demonstrations of simple conservation practices based on American experience.

After his retirement from the Soil Conservation Service in 1947, Lowdermilk was often called upon for advice on soil and water conservation projects abroad. He went to Morocco and Algeria in 1948, and to British colonies in Africa in 1949–50. In 1951 he worked for the Natural Resources Division of the Supreme Allied Command in Japan, and in 1951–54 he assisted the United Nations in New York in organizing a Soil Conservation Service. In 1955–57 he was a visiting professor at the Technion University at Haifa, Israel. Also in 1957 Lowdermilk was involved in formulating a river basin development plan for the Cetina River in Yugoslavia. From 1960 to 1969 he was a consultant for the Save the Redwoods League <sup>[9]</sup> in California.

Lowdermilk received numerous awards for his work, including the Stephen S. Wise Award for Service to Mankind. His professional honors included election as a fellow of the American Geophysical Union <sup>[10]</sup> and of the Society of American Foresters <sup>[11]</sup>; he also was president of the American Geophysical Union (1941–44). In addition to awarding him an honorary doctorate, the Technion University at Haifa named its Lowdermilk School of Agricultural Engineering in his honor. The Israelis, in appreciation of his contributions, dedicated a grove of trees in Galilee to his memory.

The Lowdermilks had two children, William Francis and Winifred Esther. Walter Lowdermilk was buried in Altadena, Calif.

## References:

J. Douglas Helms, "Walter Lowdermilk's Journey: Forester to Land Conservationist," *Environmental Review* 8 (Summer 1984).

Inez Marks Lowdermilk, *All in a Life-time: An Autobiography* (1983).

Oral history interview (Bancroft Library, University of California, Berkeley).

Randall E. Stross, *The Stubborn Earth: American Agriculturists on Chinese Soil, 1898–1937* (1986).

## Additional Resources:

National Archives and Records Administration. Wittnauer with Walter C. Lowdermilk. Video. [no date]. ARC Identifier 95866. <https://archive.org/details/gov.archives.arc.95866> [12] (accessed September 16, 2014).

Larsen, J. A.; Lowdermilk, W. C. *Slash disposal in western white pine forests in Idaho*. Washington, D.C. : U.S. Dept. of Agriculture. 1924. <https://archive.org/details/slashdisposalinw292lars> [13] (accessed September 16, 2014).

Lowdermilk, W. C. "Soil, Forest, and Water Conservation and Reclamation in China, Israel, Africa, and the United States." Oral History Interview by Malca Chall. 1969. Bancroft Library, University of California, Berkeley, California. <https://archive.org/stream/soilforestwater01lowdrich#page/n15/mode/2up> [14] (accessed September 16, 2014). [Includes portrait.]

Helms, Douglas. "Walter Lowdermilk's Journey: Forester to Land Conservationist." NRCS History Articles. National Resources Conservation Service, U.S. Department of Agriculture. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/about/history/?&cid=nrcs143\\_021442](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/about/history/?&cid=nrcs143_021442) [15] (accessed September 16, 2014).

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