

POPULARIZING THE SUBJECT OF SOIL

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Soil as a subject in the public press seems to be taboo. Professor Hans Jenny of the Department of Soil Science at the University of California at Berkeley, has commented on this (Jenny, 1984): "It is a shame that the many excellent and interesting papers by soil scientists remain confined to library shelves. New findings by chemists, geologists, geneticists and ecologists are regularly reported by the media, but new information about soils is overlooked." I suspect that our intellectual isolation and our invisibility (as soil scientists) have to do with the lack of formulating exciting ideas about soils themselves and their relations to people, and the shortage of popularizing soil science writers. "We technical soil researchers use soil language that is lifeless. The soil descriptions in our publications are utterly boring to the farmers, ranchers, foresters, sportsmen and newcomers who are supposed to read them. We may want to talk more openly about soils and do it more enthusiastically. We may even become more interesting persons, and gain...new friends...of the soil resource."

The writer has been fortunate to be active in research, teaching and outreach in soil science for more than half a century (1938-1997). Since 1980 I have given popular presentations on the subject of soil at schools, colleges and nature study centers, using my violin and a number of my soil songs, soil poems, and puppet plays about the earth beneath our feet. In the process I have developed a definition of soil (see below) which includes aesthetic terms. In view of the enthusiastic response of all ages (from 5 to 95) of persons in the audiences, I call my performances "Infotainment," meaning informative entertainment.

A scientific ("boring") definition of soil is: "*The loose mass of broken and chemically weathered rock mixed with organic matter that forms on the earth's surface.*" (Harpstead et al, 1988).

My aesthetic ("interesting") definition of soil is: "*Soil is the hidden, secret friend, which is the root domain of lively darkness and silence.*"

The conclusion reached by Hans Jenny (see above) that soil, as a subject, is taboo, is illustrated in the English-speaking world by our familiarity with a nursery rhyme by the Taylors about a star (1806), but no rhyme (until mine in 1989) about a grain of soil. These two poems are as follows:

*Twinkle, twinkle, little star,
How I wonder what you are,
Up above the world so high,
Like a diamond in the sky.*

(Ann and Jane Taylor, 1806)

*Darkle, darkle, little grain,
I wonder how you entertain
A thousand creatures microscopic.
Grains like you from pole to tropic
Support land life upon this planet
I marvel at you, crumb of granite!*

(Hole, 1989)

My goal in promoting popularization of the soil resource is not so much to attract young people to careers in soil science as to give all children and their parents and grandparents a chance to enjoy the soils of their native landscape. In my poem about the study of soil, entitled, "What is an Earth Soil?" (Hole, 1989) I include these two lines:

*Our native soil claimed us all from the start;
Gave us our landscape and captured our heart.*

As an amateur actor and dancer I encourage children and adults to experience their native soils and the vegetative cover in gentle ways. Children laugh with delight when allowed to run and roll on clean, well-drained grassy slopes in the cool of a summer evening. At supervised beaches people can investigate the primitive sandy soil with bare feet and hands. In my song, "Walking on the Earth" (Hole, 1989) I celebrate the two kinds of explorations that we people do: 1) Exploration of landscapes by touch, sight and sound; and 2) Exploration of each other's thoughts and feelings by practicing language communication. The words to the song are as follows:

*1) The moment that a child can walk,
Like that in which it first can talk
Is a precious start of exploration
Into landscapes of creation.*

CHORUS: Walking, Walking Walking on the earth.

*2) By sense of touch the feet assess
The nature of the wilderness
Of earth beneath. Yet human speech
Cannot express what feet can teach.*

CHORUS: Walking, Walking Walking on the earth.

(Hole, 1989)
