

That is, if a man who irrigates put water on one acre of land sufficient to cover that acre four inches deep and leaves it without cultivation, in ten days the whole of that water will have evaporated. A rough estimate of the acreage planted to orchard in Kettle Valley is 1,000 acres and during the summer months if this ground is not cultivated directly after a rain or directly after irrigation, from this orchard ground alone there is a loss by evaporation of nearly 5,000,000 gallons per day each and every day until cultivated or until the moisture has all left the soil.

For clearer illustration let us consider a ten acre orchard, a common size. Towards the end of June we usually get rain; as soon as the rain stops loss by evaporation begins; in twenty four hours 108,000 gallons have gone, in five days 540,000 gallons have evaporated, in ten days 1,080,000 gallons have left the soil from the ten acres of ground. The man who has a sufficient supply of water to irrigate with can replenish the ground, but why waste that 1,000,000 gallons? Is it not better to cultivate immediately after the rain and save the water that is already in the ground.

Of course with the dry farmer it is a matter of much more vital importance for if he lets 1,000,000 gallons of water waste from ten acres he has no means at hand whereby he can replenish it; it is gone entirely, and before more rain comes the trees are apt to be suffering for want of moisture.

As long as there is moisture in the land it evaporates unless checked by a soil mulch, and while cultivation at any time will form a soil mulch and check evaporation, the most perfect soil mulch can only be made directly after rain or irrigation before the surface has become dried. Every day that ground is left without cultivation after rain, water has left it at the rate of over 10,000 gallons per acre that the dry farmer has no means of replacing.

Further it is most convincingly argued that products from ground treated in this way are superior in quality and flavor to those where such over-irrigation has been done as is necessary where this cultivation as advised is not carried out; while the productivity of the ground is not only increased but conserved for the products of value, not wasted in weed growth.