

"Soils of Oregon," Subject Of An Interesting Lecture

The following lecture on "The Soils of Oregon" was delivered by Prof. Von Eschen of Willamette university...

By Professor Florian Von Eschen.

To discuss the soils of Oregon adequately seems to me altogether too large an undertaking in the time allotted for this purpose...

Soil is the layer of disintegrated rock, mixed with the remains of plants, which covers a large portion of the land...

Sometimes the subsoil becomes a dense and more or less hardened layer, then it becomes known as hardpan, and this is a detriment, because it obstructs the penetration of both roots and water...

Among the principal soil-forming rocks we must place granite, felspar, silicates of potassium and sodium, eruptive rocks, as the various types of basalt, trachyte, rhyolite, diabase, diorite, and volcanic ash...

From the standpoint of the chemist, a good soil must contain potash, nitrogen, phosphorus and lime in such form as to be available for plant food...

The second class of soils to which I wish to direct your attention is the sandy loam type. This type covers a considerable area in the state...

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Basin and central Oregon. Legumes, manure and applications of potassium in commercial form, give splendid results...

Now we come to the third type, the Marsh Soils. As their name suggests, these soils are the results of the accumulations from the decay of generations of the rank growth of the fresh water marshes...

As stated, they are a very uniformly fine grained powdery soil, having the desirable qualities of clay for the retention of moisture and plant foods...

The first step in the reclamation of the marsh soils is drainage, or, along the coast, through diking and drainage. A great deal of the land along the Columbia has been reclaimed...

North of Klamath Falls, there is the Sycam marsh and a little farther there is Silver Lake marsh. Between Summer lake and Abert lake is what is called Chemisean marsh...

The first special type I wish to mention is the Adobe Soils. This type of soil, sometimes called "black sticky" or "red sticky"...

Among all the remedies is Daniel J. Fry's popular drug store, there are few that he is willing to sell on a guarantee to refund the money if they do not cure.

Another feature that is of considerable importance in the selection of soil is to understand the subsoil. West of the mountains most of the soil has a loam or gravel and sand for a subsoil...

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of acres to as high as a quarter section in some cases. Many farms in western Oregon, especially those in the portions of the valleys adjacent to the hills...

Notwithstanding its objectionable features, this soil is one of the most valuable found, when handled properly, and the farmer is amply repaid for the additional care it must receive...

The next type is the "Granitic Soils." This type of soil occurs only in southern Oregon, largely in the Rogue valley, where considerable areas of it are found on portions of the rolling hill lands and in the valleys...

This peculiar type covers only a limited area at the head of the Deschutes river in central Oregon, extending as far south as Klamath Falls. It is white, gray, yellow or light brown in color and very coarse and porous in texture...

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There is more Catarrh in this section of the country than all other diseases put together. It is said that in the last few years was supposed to be incurable. For a great many years doctors pronounced it a local disease and prescribed local remedies...

ter and root-rotting, it soon allows the top-soil to become poor and unfruitful, and if planted to orchards, the trees cannot get a food-hold and will grow for a few years and then die.

In this valley, especially, and in some other humid parts of Oregon, where the subsoil contains little or no humus, a great many acres have been almost ruined because those that cleared the land did not know how to cultivate it.

There is one other condition to which I wish to call your attention before I close, because I deem it of great importance to this valley and most of our coast country. In the presence of so much moisture as will materially impede the access of air, and with the occurrence of reasonably low temperature, conditions existing in the Willamette valley during the winter the organisms that at first take the chief role in the transformation of the vegetable tissues into humus-like substances or bacteria...

The sour soils thus produced in the presence of excess of water, gradually increase in acidity and finally become of little or no value agriculturally. We have in this valley some such and much that is slightly acid and the owner wonders why they cannot raise better crops...

The last type to be considered is "Alkali" soils. Because of the heavy rainfall, alkali soils do not occur west of the Cascades in Oregon. In eastern Oregon practically all of the soils are moderately alkaline in reaction, but only sufficiently so as to make the quality of great value in offering desirable soil conditions for crop production...

A large portion of central Oregon is covered with a volcanic ash, slightly soluble in water, the resulting product is an alkali. Summer, Abert, Malheur and Harney lakes are strongly alkaline and the millions of acres tributary to them are practically worthless except in spots of small areas.

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Gen. Vassich, Man Whose Army Swam to Battle. By William G. Shepherd. (United Press Staff Correspondent.)

Monastir, Servia, Dec. 1.—(By mail)—This is to introduce General Douan Vassich. He isn't a general at all in Vassich; only a Servian colonel; but between now and the time you read this he'll be promoted. By that time Monastir probably will have fallen and the last big city of the Servians will be in the hands of the Austro-German-Bulgars...

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