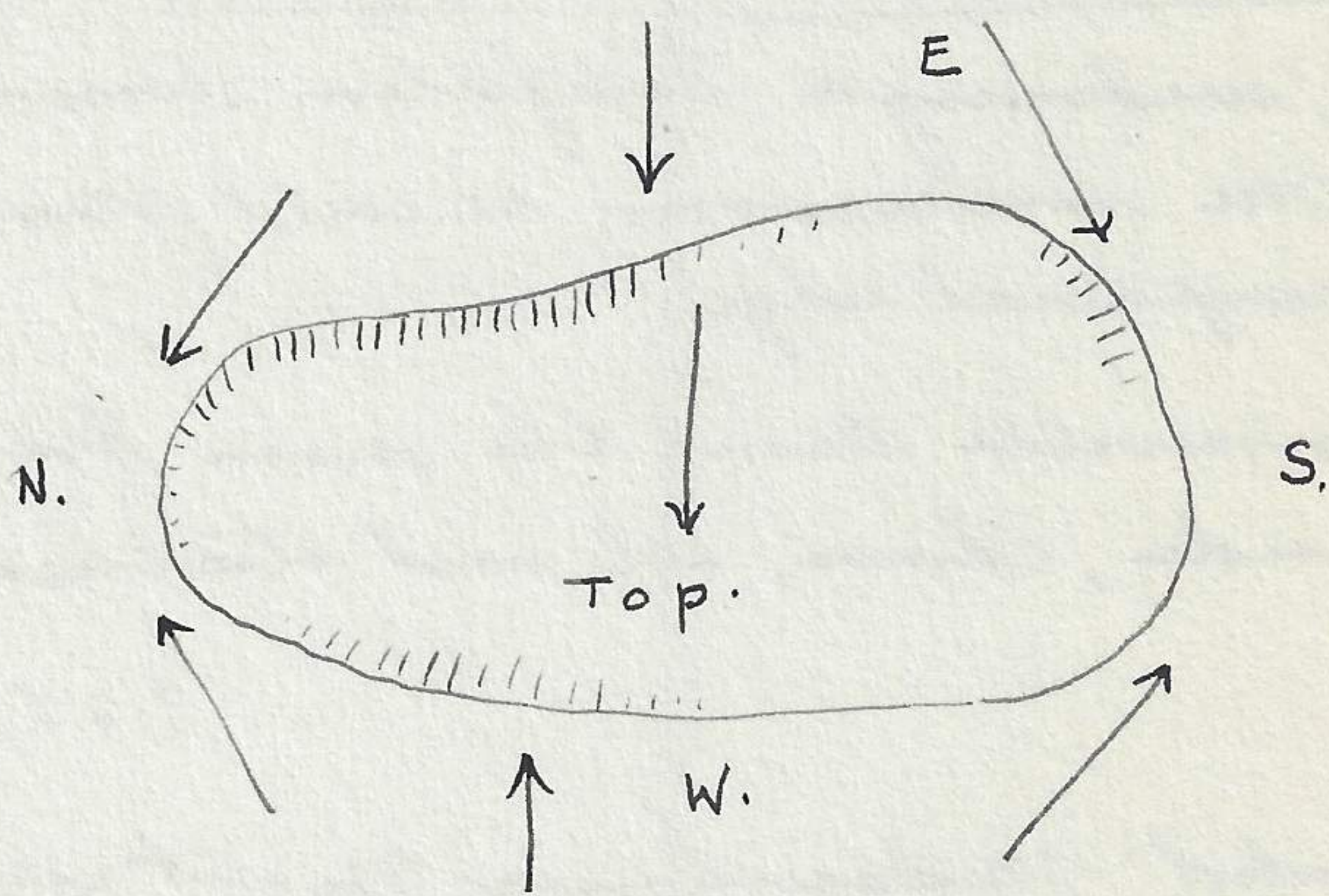
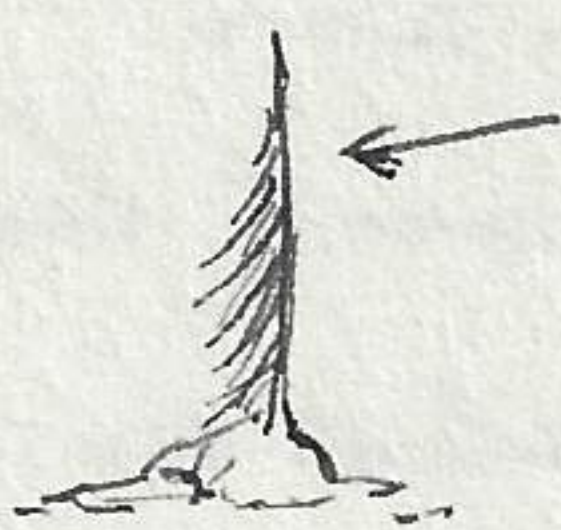


7/27/41

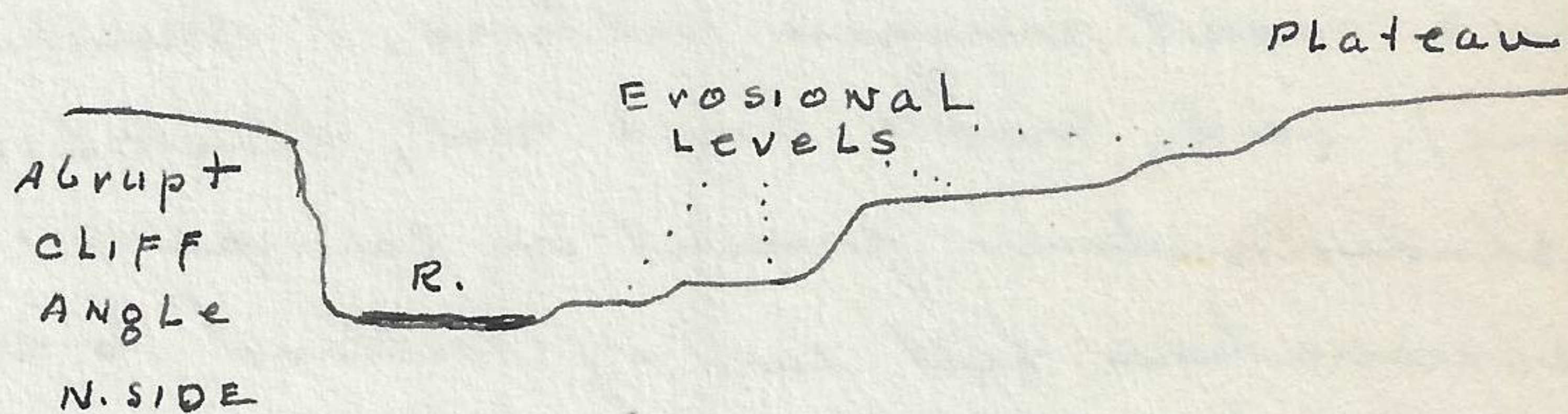
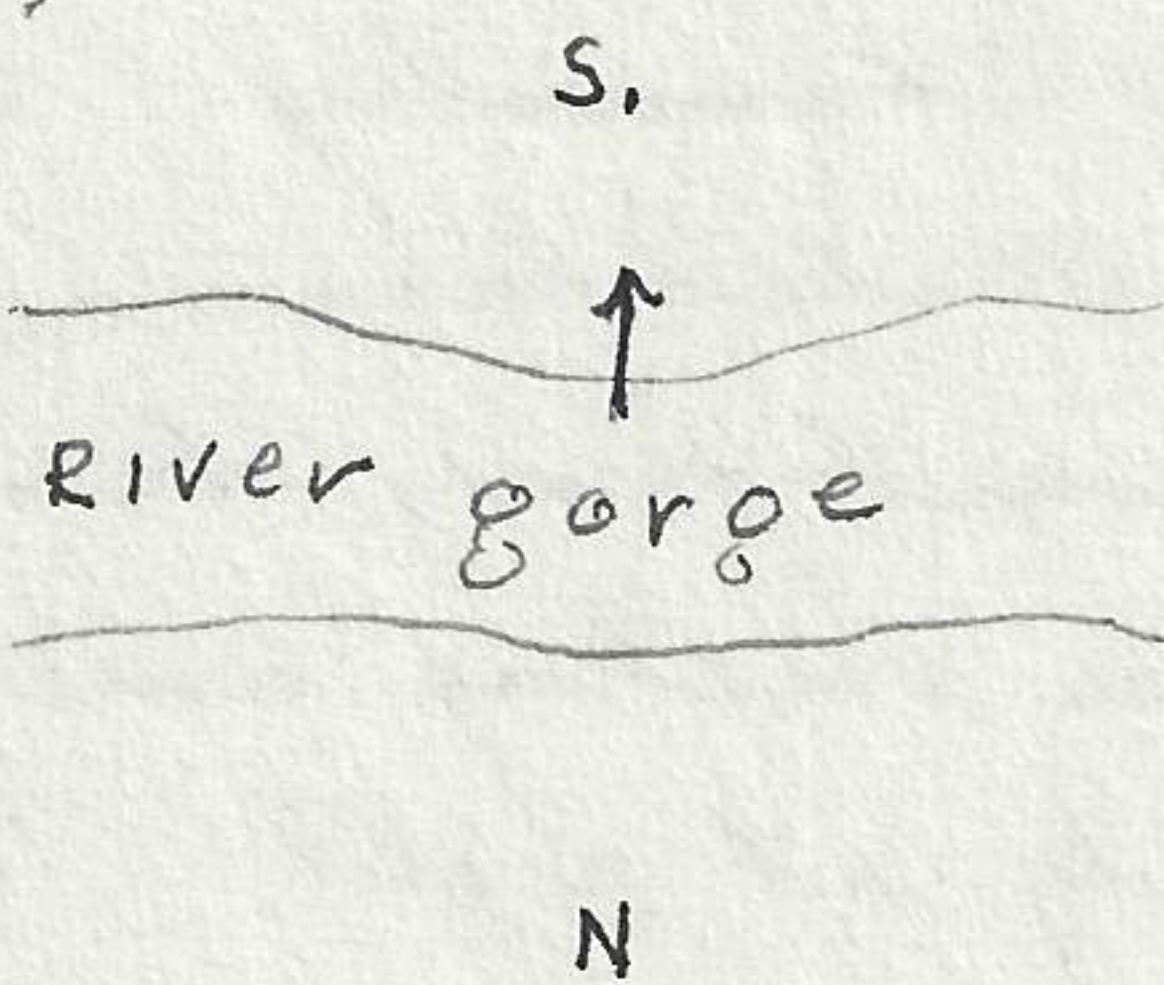
410727-107

Trip to Bonneville Dam on Columbia river and return. Proceeded up gorge on north side of river and returned on Oregon side. Crossed at the Bridge of the Gods. At Beacon Rock Park ascended to top of trail. Wind effect upon trees evident. All along the Columbia Gorge one finds that the conifer trees have been feathered out on one side in command to the pressure of the canyon winds. At first I felt that I could definitely establish the prevailing wind but later found that I again could not be too sure. The manner in which the trees were effected as I climbed the rock are of this nature.

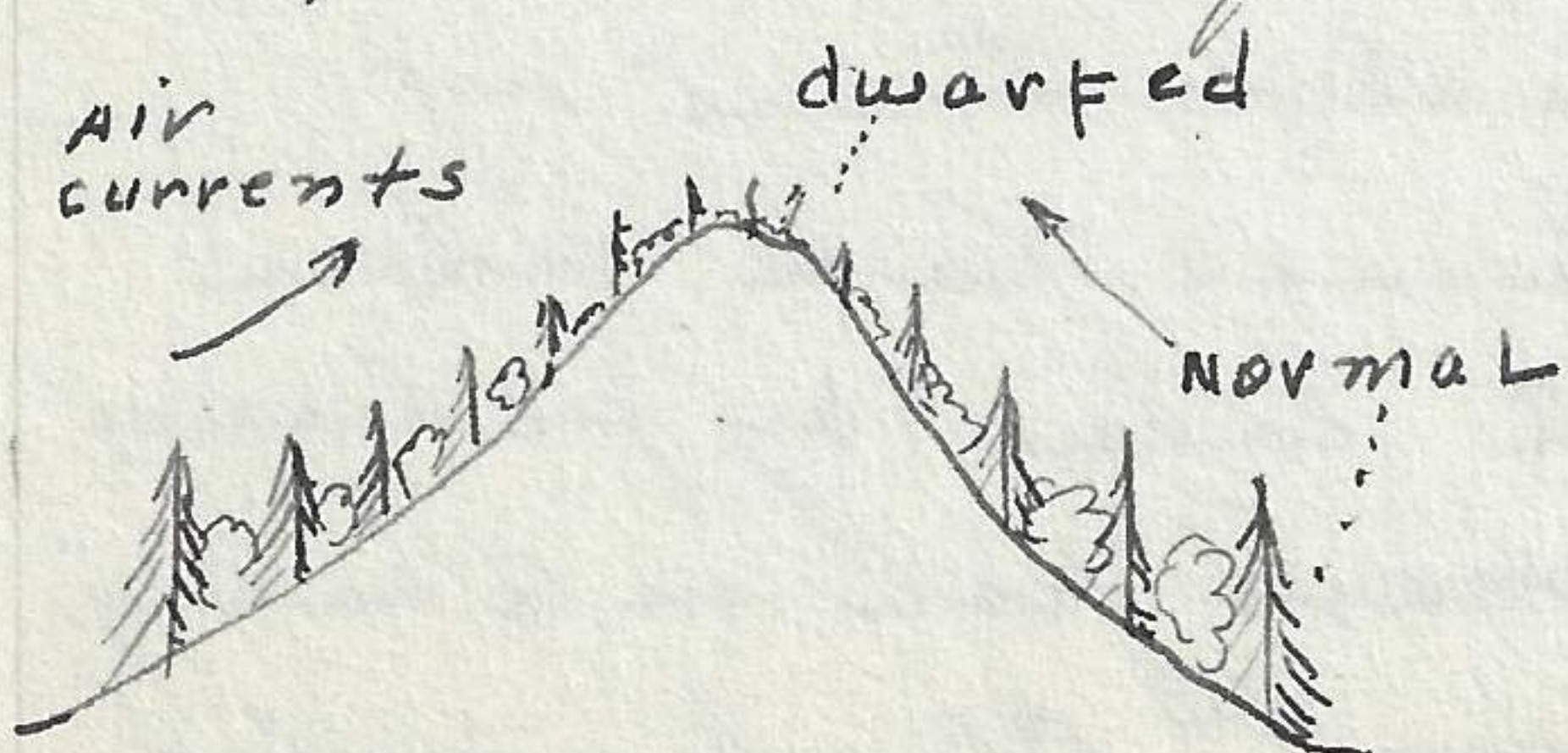
The arrow in each case indicates the direction in which the trees are bent or stream lined. It is interesting to note that the trees on top of the rock suffer from the east winds which would indicate that possible the persistent winds are from that direction, or at least the more senior winds. The trees on bank of gorge on the south side of river seem to be effected by north winds.



The topography of the river



gorge at certain points seem to conform to one of progressive lowering of channel with erosional levels to bear mute evidence to the actual destruction work of nature. The wind effect upon the conifer trees along the river gorge brings up the problem as to whether dwarfed trees on mountain ridges are so dwarfed because of soil or wind conditions. It looks like wind may be a factor. It is quite evident that the size and manner in which a conifer tree develops is in ratio to amount of wind received. If that is the case, those trees found in a dwarfed condition on ridge tops are so



because they receive the maximum effect from winds in both or all directions, whereas those trees and other stages of vegetation further down from the ridge are normal. due to the fact that they receive winds from one direction only. The birds observed on the east side