http://geology.19thcenturyscience.org/books/1902-Geikie-Geology/README.htm

1471 to 1776, the "vigueries," or provostry-districts of the French Alps, lost a third, a half, and even three-fourths of their cultivated ground, and the population has diminished in somewhat similar proportions. From 1836 to 1866 the departments of Hautes and Basses Alpes lost 25,000 inhabitants, or nearly one-tenth of their population—a diminution which has with plausibility been assigned to the reckless removal of the pine forests, whereby the steep mountain sides have been washed bare of their soil. The desiccation of the countries bordering the eastern Mediterranean has been ascribed to a similar cause.[836]

5. In mountain districts, pine-forests exercise also an important conservative function in preventing the formation or arresting the progress of avalanches. In Switzerland, some of the forests which cross the lines of frequent snow-falls are carefully preserved.

Animals do not on the whole exert an important conservative action upon the earth's surface, save in so far as they form new deposits, as will be immediately referred to. On many shores, however, by thickly incrusting rocks, they act like the marine vegetation above alluded to, and protect these to a considerable extent from abrasion by the waves. The most familiar example in Europe of this action is that of the common acorn-shell or barnacle (*Balanus balanoides*). Serpulæ often incrust considerable masses of a coral-reef, and act like nullipores, in protecting decaying and dead corals from being so rapidly broken up by the waves as they would otherwise be. But even soft-bodied animals, such as sponges and ascidians, when they spread over rocks near

[836] Recent attempts to reclothe the desiccated stone-wastes of Dalmatia with trees have been attended with success. See Mojsisovics, Jahrb. Geol. Reichsanst. 1880, p. 210.