

a swamp, and swamp plants appear—the iris, the sweet gale, some mints, species of *Galium*, and the dewberry; while the spruce gives way to the white cedar, *Thuja occidentalis*, and the alder becomes abundant, forming a dense jungle. But this is of less interest than the vegetation of the outer zones, and hence I gave it little study.

Thus it appears that these woods present no features, size of the plants alone excepted, markedly different from those of woods preponderatingly coniferous in the neighboring upland, and they are evidently tending towards the typical woods of this region—the mixed coniferous-deciduous forest.

We have thus another illustration of that principle so important in physiognomic ecology, that vegetation, no matter under what immediate physical conditions it may be, is always tending towards a climax type, determined primarily by climate.

#### CONCLUSION.

In this paper I have tried to state the facts about the vegetation of a somewhat remarkable place, adding thereto some ecological comment whose chief value is to illustrate our ignorance of that subject. As I understand it, such descriptions as this aims to be may have three values. First, they can present to all who have interest in such matters a series of pictures, as vivid and realistic as possible, of the vegetation of special places, and they are the more valuable according as they are the more clearly and attractively written and the more aptly illustrated. Second, they should help to supply information, badly needed by all of our manuals, about the natural habitats of the common or important species of plants. Third, they can form storehouses of facts about vegetation upon which the future student can draw as the advance of physiological ecology gradually makes possible an understanding of the principles underlying physiognomic ecology. Such descriptive work can be done to profit by the student whose work is perforce confined to his summer vacations, if he but bring to it time and care enough; but he should be content to describe well and to leave interpretation to the field physiologist yet to come. Speculation cannot of itself advance knowledge, and it can bring a subject into disrepute. It is only, I believe, through field physiology, the study