

General Directions for Field Work in
Plant Ecology

Field work differs from laboratory work in that natural objects are studied under natural conditions, instead of artificial or controllable conditions. For this reason all the objects to be studied may not be under observation at the time or in one locality, but may be separated by time or space. Laboratory work, if unsuccessful, may usually be repeated easily; field work is generally repeated with more difficulty, with great loss of time, or not at all. Field work, therefore, requires in a much greater degree carefulness of observation, attention to details, and, above all, completeness and accuracy in taking notes. The following points are suggested as general directions.

Make all observations with great care, and after satisfying yourself of their accuracy, look once more.

Record all observations in detail in your field notes while actually in the field. THIS IS IMPERATIVE.

Take up the work in this order:

1. Become familiar with the general location and topographic features of the area, and describe them in such detail that one not familiar with the locality can form a good mental picture of the area. This description may well include not only the area to be studied but also its immediate surroundings.

2. Observe and describe the general features of the environment. Climatic features, especially rainfall and temperature, may be omitted in the field records, and in Botany 17 and S 6, from the finished work also. A short statement concerning them should be included with the first field report in Botany 18. The local edaphic factors should be described, and special attention given to those which are peculiar to or distinctive of the area, such as shade, proximity to water, slope, cultivation, etc. Give special attention to active factors, which are producing or will produce a change in the vegetation. Among these are erosion of land by water, filling of water by sediment, development or destruction of forest, grazing, etc.

3. Describe the vegetation and correlate its various features with the environment. No specific directions can be given here. Detailed questions will usually accompany field outlines in Botany 17 and S 6, and will suggest themselves in Botany 18.

4. Decide upon and describe the past history and the future development of the vegetation under the existing environment. Neither can be judged with entire accuracy because of possible environmental changes, due partly to physiography, and partly to the vegetation, but mostly to the agency of man.

5. Correlate the local conditions, as expressed in points 3 and 4, with those in other similar localities, and discover the general significance and the wider application of the problem studied.

At the close of the field trip hand the field notes to the instructor for examination. They will be returned at the next meeting of the class.

Study the field notes thoroughly, satisfy yourself as to the correctness of the conclusions drawn, and write a careful, concise, logical, complete account of the work on standard note paper. This may be written in the order suggested in points 1 to 5 preceding. The various divisions should be provided with individual headings. Support each conclusion by a statement of or reference to the proper field evidence. Summarize the whole in a final paragraph. Hand the finished account to the instructor within five days from the date of the field trip. Grades will be apportioned as follows:

Field notes	15
Accuracy of observation of vegetation and environment	35
Conclusions drawn	30
General application (point 5)	10
Neatness	10

Total 100

Deduct for each day late 3