REPORT OF SUBCOMMITTEE ON PLANT ECOLOGY

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(In Abstract*)

This report on "The Selection and Use of Ground Covers in Highway Areas" attempts to analyze the factors which may lead to successful establishment of ground cover plants. The following basic points are emphasized:

1. The establishment of native ground covers on cut and fill slopes and highway gutter areas is the most effective method of preventing soil erosion on highway lands.

2. Before relocation and construction new highways should be inspected by competent landscape engineers to provide for conservation of topsoil and of the most desirable existing trees and other vegetation.

3. Successful control of erosion on highway areas by means of ground covers is largely dependent upon a properly rounded cross section which can most economically be provided as a part of the original construction contracts.

4. Selection of the proper ground cover or combination of native or naturalized ground covers for a given highway area can be determined by technical landscape analysis of each seeding or planting site. Existing native growth is the most reliable indicator of the plant or plants to be selected.

5. Planting operations to be successful must be performed by crews which include at least a cadre of experienced labor. Good technical direction and inspection plus skilled labor in planting operations must be supplemented by mulching where necessary and by proper maintenance after seeding or planting.

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6. If planted ground covers are properly mulched and pruned at the time of planting, watering and other maintenance should not be necessary after about the second growing season following planting.

7. Intersection triangles and median strips in divided highways should be, as far as possible, merged by means of seeded or planted vegetation into the terrain which adjoins the highway. This objective implies the use of native or well naturalized plants and usually bars use of garden types of plant materials on open country roadsides.

8. High growing shrubs or evergreen trees are rarely suitable for intersection or median strip planting. Ground covers or grasses which will not exceed a height at maturity of about 3 feet are indicated in the interest of traffic safety and economical maintenance.

9. As a rule, the best ground cover for intersection triangles and median dividing lanes is a low growing vine such as Hall's honeysuckle, periwinkle, or wichuriana rose. Such a ground cover once established requires little or no maintenance. Where grasses are used on intersection areas, a meadow type of sod rather than lawn sod should be established. Lawn mowing and maintenance is very costly.

10. On slopes or intersection areas too rough or too steep for machine mowing, vines or native shrub ground covers should replace grass.

A highway located to fit the "lay of the land" and merged into existing topography by means of a well rounded cross section is essential for the most economical establishment of ground covers. Such a highway requires the cooperation of the engineers of highway location, construction and maintenance with the landscape engineer before, during and after construction.