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**LODGE AREA REVEGETATION PROJECT
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INTRODUCTION

In October, 1993, the hilltop between the lodge and Motel Unit "B" was revegetated by Bio-tech Edward Franz. 750 plants, received from the Soil Conservation Service in Meeker, Co., were planted as a pilot project for the upcoming road revegetation project which will begin in the fall of 1994. 24 Ponderosa Pine trees were also transplanted into the area by John Bladh in 1990. In order to ascertain the success of the revegetation project, a follow-up survey was performed in late May by Bio-techs S. Petersen and B. Warren.

METHODS

Five species were involved in the revegetation project. These were:

- 1) Artemisia nova (ArNo)
Black sagebrush
- 2) Arctostaphylos patula (ArPa)
Greenleaf manzanita
- 3) Chrysothamnus nauseosus (ChNa)
Rubber rabbitbrush
- 4) Elymus trachycaulus (Gras)
Slender Wheatgrass
- 5) Pinus ponderosa (PiPo)
Ponderosa pine

Ten plots were mapped for monitoring the survival rates of the revegetated plants. Each plot contained 15 or more auger holes containing 1-3 plants. The auger holes were still visible aiding in their relocation. In addition, the soil from the potting plugs could be recognized allowing plant relocation even when no living matter remained.

The plants had not been watered since the initial planting.

E. Franz noted when initiating the project that most of the rabbitbrush and sagebrush plants were in poor condition when received.

RESULTS

The projects overall success rate after 7 months, calculated by weighted average, was 90.9%. Rabbitbrush and wheatgrass fared particularly well, having 100% survival rates. Black sagebrush had a success rate of 87.5% while Greenleaf manzanita was least successful with a survival rate of 81.0%.

The survival rates for individual plots varied greatly. Plots 1-5 exhibited high success rates for all species with an overall survival rate of 95.2%. Plots 6-10 had much lower survival rates at 91.7%. While the differences in the percentages appear insignificant, the variation is created by only one species. The 100% success of the grass and rabbitbrush mask much of the variation. The differences in sagebrush survival rates were an insignificant 2.1% between the two plot groups. For plots 1-5, manzanita had a survival rate of 93.1% while plots 6-10 had only 81.3% survival.

The variation in manzanita between the two plot groups are possibly accounted for by physiographic differences. The variables examined were slope angle, slope aspect, rockiness and coarsity of soil, and degree of shading (see table 1). South-facing, well drained, poorly shaded plots were expected to have the lowest survival rates. This was not true in many cases. The effects of soil coarsity varied widely while slope angle and aspect conformed to expectations. The degree of shading had effects contrary to those expected. Regions with poor shade were more successful than those with greater shade. As the summer progresses and water availability becomes more of a critical factor, the effects of soil coarsity and shading will probably merge with expectations.

