GUIDE: MANAGEMENT PRACTICES FOR SOD IN THE SHADE

Turf areas receiving less than 4 hours of direct sunlight per day typically require additional pre-installation considerations and modified maintenance programs. Due to the unique issues involved in growing turf at high altitude, successful options for vigorous turf are further limited by factors like shade. The following points are specifically related to low-light lawns in mountain landscapes where native clay soils and snow covered winters are the norm.

- **Soil Preparation** – Drainage is a critical factor when air movement and drying are limited. Establishing positive grade by utilizing slope and swales to move heavy water loads off of the surface is more critical than in sunny areas. Sub-surface drains may also be needed. Equally as important is the structure of the soil for both percolation and root depth. Often, incorporating sand and organic material into the clay base soils can reduce compaction characteristics and allow water and nutrients to filter down through the root zone.
- **Grass Selection** – In the Rocky Mountains we are limited to cool season grasses. At higher elevations where long, cold winters and extended periods of standing snow force grasses into deep dormancy, Kentucky bluegrass out performs fescues and ryegrasses. Of the many cultivars of bluegrass, certain types have been developed for specific strengths. Shade tolerance and disease resistance are characteristics usually paired together, and varieties like Showcase perform exceptionally well in trials. In some cases a light over-seeding each spring with grasses like fine fescue can increase the seasonal density of more heavily shaded areas.
- **Watering** – Deep and infrequent watering is good practice on all turf, but especially important in shade situations. Susceptibility to various fungal pathogens is the biggest problem for shaded turf and surface drying inhibits fungal growth. Treating the soil with conditioning materials such as yucca extract and humates can assist in transporting water more quickly down though the root zone and away from the surface.
- **Fertilizer** – Nitrogen requirements for turf in shaded areas will be half of what is needed by grass in full sun. Around ½ pound of nitrogen per 1000ft² per application is sufficient. Utilizing slow release nitrogen sources is important for even growth. Sources that release by hydrolysis such as IBDU or from organic sources are preferable. Adequate secondary nutrients like magnesium as well as micro-nutrients in chelated form need to be provided in sufficient amounts to fortify the plants to maximize the photosynthetic capacity as much as possible to take advantage of any light available.
- **Aeration** – In clay based soils an annual aeration with plug or spike machines is very beneficial; in shady areas it is essential.
- **Mowing** – As with normal turf the blades must be sharp and no more than 1/3 of the grass blade should be cut off in one mowing. Leaving the blades around ½ inch taller in the shaded areas can help to provide as much leaf surface as possible for photosynthesis.