



SEED & SUPPLIES FOR NORTHERN CALIFORNIA

CALIFORNIA NATIVE GRASSES ON THE GOLF COURSE

INTRODUCTION: Much of California was once dominated by native perennial grasses. Overgrazing and the introduction of exotic species during the 1800's reduced these natural grasslands to the relic stands we now find scattered throughout the state. Over the last two decades, collection and production have made these grasses practical and available for use on the golf courses of tomorrow and today.

Once established and with planned, continuing management, California native grasses can provide opportunities for:

- Reduced water use
- Persistent ornamental ground cover
- Excellent erosion control
- Reduced weed competition
- Enhanced wildlife habitat
- Reduced fire hazard
- Low or no chemical applications
- Reduced mowing

California native grasses are diverse in character and include both warm- and cool-season types of plants maturing to both compact and robust sizes. In the golf course rough and other out-of-play areas, the look of native grasses, sometimes combined with wildflowers, can be either ornamental and well-kept or somewhat wild and woolly. Some of these grasses have blades of fine texture and others are broader-bladed. Some grow in a clumping habit and others spread by runners above and below the ground. All are renowned for their drought tolerance or drought avoidance abilities.

Since the establishment and management of a landscape based on native California grasses is best viewed as a process --- which could take several years --- as opposed to a one-time event, it is highly advisable that a restoration specialist be engaged in order to guide the initial planning, to shepherd the project through the various phases of grow-in, and to help design of a long-range maintenance program.



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PLANNING, SEEDING AND MAINTAINING: With an ever-increasing interest in more naturalistic environments and a host of pressures related to the allocation of irrigated water, it is no wonder that California native perennial grasses have drawn more and more interest as the plants of choice for out-of-play areas on many golf course perimeters throughout the state. Direct seeding of such plants has likewise become a viable option. However, these perennial grasses have evolved in adaptation to natural rainfall regimes and, unlike annual and many turf-type hybrid grasses, they generally grow slowly during the first year. Native roughs might take a full two years to develop into a complete stand.

Although special attention must be paid throughout this longer initial establishment period, the rewards of a successful planting pay off over the long run. As mentioned above, a permanent stand of native perennial grasses offers the possibilities of lower maintenance, aesthetic enhancement and improved wildlife habitat. And the natural drought tolerance of native plants provides a truly compelling benefit: little to no supplemental irrigation needs to be delivered to an established stand.

PLANNING: The optimal time to plant California native grass seed is in the fall when moisture and soil temperatures are usually favorable for plant establishment. Most of these grasses are cool-season growers and can also get off to a good best start if planted in early spring.

Seeding rates depend on the seed count, purity, germination and vigor of the particular species you choose, and whether you intend to use several species together in a mix or plant pure stands of a single species. Generally, the large-seeded natives should be broadcast seeded 25-45 PLS <http://www.pcseed.com/docs/PureLiveSeed.pdf> Lbs. per acre.

Perennial grasses respond favorably to fertilizer after they have developed a substantial root system. Thus, at planting time, a slow-release, balanced formulation such as the organic Biosol™ Mix 7-2-3 <http://www.pcseed.com/docs/BiosolMix7-2-3.pdf> would be preferable to an application of soluble nitrogen typically used with turf grasses. The goal is to assist in healthy root and crown development during the first growing season so that the plants can survive the first summer's drought.

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SEEDING: Seedbed preparation is of prime importance when establishing perennial grass. Above all, annual grass and weed competition must be controlled. A “grow and kill” cycle is a worthwhile investment and almost always usually advisable: herbicides, harrowing or disking are common practices used prior to the actual seeding. In areas with access for ring rollers or cultipackers, soil can be worked and then lightly compacted prior to seeding with a range drill. In rougher terrain where drills and rollers cannot be used, it is possible to harrow the soil and then broadcast the seed or hydroseed. After fall rains germinate the annual weeds, an early mowing or herbicide application is often utilized. This method has been effective not only in reducing the competition from annual grasses and forbs but also in helping the perennial grasses get off to a good start. Regardless of planting method, seed has the best prospect for success when placed just below the soil surface with seed-drill equipment or when provided with an organic mulch as when hydroseeded.

MAINTAINING: Distant rough areas that have been seeded with native perennial grasses are often mowed one or more times per year, depending upon your objectives. When it is time to mow, mow the area 4-8” high. To create a denser stand, wait until the seed on the grasses is dispersed before mowing, in order to let the grasses re-seed themselves. The cool season perennials will most likely begin to fade to a straw color as the soil moisture dries and the plants begin to go dormant into the summer months. Do not attempt to force your native grasses to green-up by applying extra amounts of water or fertilizer; the plants need to “rest” during the summer months. When fall rains return, the grasses will awaken and turn green again.

If native perennial grasses are to play an important role in your next construction or revegetation project on the course, consultation with a grassland restoration specialist might prove to be the most effective way to determine which species, rates, methods and timing are appropriate for your particular situation.