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Fact Sheet -06-83

Selection and Care of Ornamental Grasses for Northern Nevada

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The term "ornamental grass" refers not only to true grasses *(Graminae)* but also to close relatives of grasses and grass-like plants. Many plants that we think of as grasses are actually sedges *(Cyperacae)* and rushes *(Juncaceae)*. Ornamental grasses are valuable in the landscape because they provide seasonal interest, add color and texture to a perennial border, and provide valuable wildlife habitat. It is important to understand the physical and cultural attributes of ornamental grasses to best incorporate them into the garden.

Selection of Ornamental Grass

Ornamental grasses are typically selected for their inflorescence, or flower, and for their foliage structure. (It is important to understand that grasses are not “flowers” even though they have a flowering part. They have distinct biological differences from other flowering plants. These differences are discussed in the maintenance section of this Fact Sheet.)

Flowers

The flowers of an ornamental grass have different forms. The most common are panicle, spike and raceme (Fig. 1.) For example, blue fescue has a spike, Northern sea oats has a raceme, and Indian rice grass (Nevada’s state grass) has panicles.

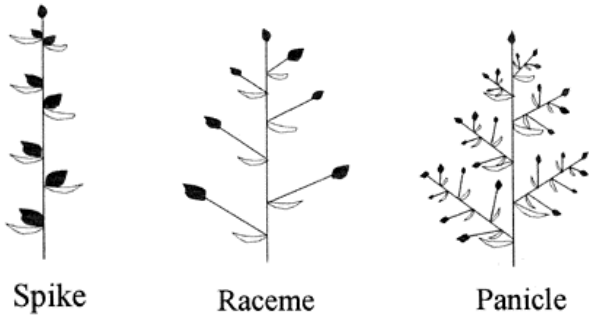

Figure 1. Three common flower forms of ornamental grasses. Picture courtesy of Food and Agriculture Organization of the United Nations.

Foliage Structure

Ornamental grasses posses various types of foliage structures (Fig. 2).

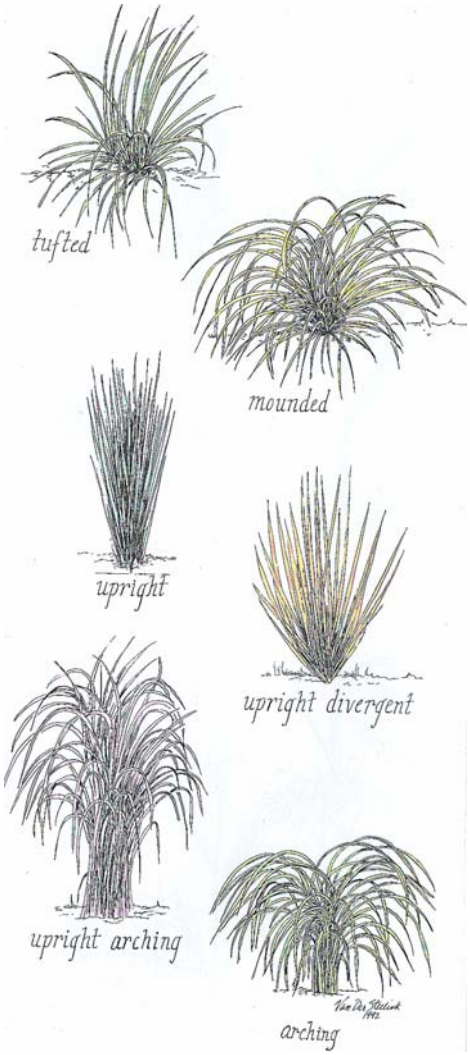

Figure 2. The most common foliage forms of ornamental grasses. Illustration courtesy of Greenlee 1992.

Common foliage forms may be described in plant catalogs and at nurseries as follows:

- **Tufted —** spiky or fine-textured foliage. These are often clump formers. An example of a tufted form is blue fescue (*Festuca ovinia var. glauca*).
- **Mounded** — somewhat weeping with the top growth covering the lower leaves. Fountain grass (*Pennisetum* spp.) is a beautiful mounded grass.
- **Upright** — columnar and uniform sporting a rigid vertical form. The ubiquitous common cattail (*Typha latifolia*) is an upright grass.
- **Upright divergent —** foliage grows upright and out providing stiff and erect texture. blue oat grass (*Helictrichon* spp.) is an excellent example of upright divergent growth form.
- **Upright arching —** foliage ascends vertically then becomes "fountain-like." Commonly available maiden grass (*Miscanthus sinensis)* displays upright and arching growth.
- **Arching —** foliage arching up and out in almost equal proportion. Giant sacaton (*Sporobolus wrightii*) is a lovely example of an arching grass.

Growth Habit

Grasses can grow in discrete clumps or bunches, or they can spread out, forming mats using modified stems. Modified stems visible aboveground are called stolons. Underground ones are called rhizomes. Make sure to know how a selected grass grows. A mat former will spread and soon grow out of a small space, becoming a maintenance problem. A bunch grass would be a better choice if you want to keep the plant confined in a small space.

How Grasses Grow

Grasses fall into three categories: annuals, biennials and perennials. Annual grasses grow one season and die after flowering or when damaged by frost. A biennial generally grows over two seasons, sporting only vegetative (nonflowering) growth the first year. The second year, it produces both vegetative and floral growth before it dies. This is important to know because if a biennial has had a period of rest in the greenhouse, it may be in the second year of growth and act like an annual in the garden, only providing color and texture for one growing season. A perennial grass will overwinter and come back each year. Perennial grasses can be short-lived (lasting just a few years before dying) or long-lived (lasting for many years or even decades). Most ornamental grasses available for the garden are perennial.

Additionally, grasses can be herbaceous, woody, or semi-woody. Bamboo is an example of a woody perennial grass.

Seasons of Growth

Grasses are classified as either warm-season or cool-season species. Warm-season grasses grow when temperatures begin to warm in late spring, to between 80 degrees Fahrenheit and 95 degrees Fahrenheit, then flower and set seed in summer and fall. Cool-season grasses grow best when air temperatures are between 60 F and 75 F and soil temperatures range from 40 F to 45 F. Cool-season grasses generally require more moisture than warm-season grasses.

The season of growth may be affected by the plants' location within the garden. Microclimates, such as in front of a rock on the south side or protected on the north side of a home, may affect vigor and performance. Frost pockets within a neighborhood and topographic changes within a larger area may also affect growth and reproduction.

Maintaining Ornamental Grasses

Proper selection and placement are essential to keep maintenance at a minimum. The following information outlines standard maintenance issues.

Watering

All grasses, even native and drought-adapted ones, require regular irrigation during the first year to establish vigorous root systems. In Northern Nevada's hot, dry climate, newly planted grasses may need water several times a day to be kept sufficiently moist. It is best to supply water with a drip system or by hand, ensuring deep penetration to the roots. Avoid overhead sprinkler irrigation, as it can cause a rapid decline of the flowers. After establishment, watering regimes should be adjusted to the needs of the specific grass. Once established some native and ornamental grasses are somewhat drought-tolerant, and may need very little supplemental water. However, always keep a keen eye on your plants, and provide additional water when they look stressed. Also, keeping the foliage cut back to one-fourth or one-third during the first

year of growth may reduce water use and encourage new vigorous growth.

Cutting Back and Combing

Cutting back once a year in the spring can be an important maintenance practice for growing attractive healthy grasses. It can serve as a substitute for periodic burning and grazing, two important and natural processes in grassland ecosystems. However, be sure to leave the foliage for most of the winter so that you can enjoy the attractive foliage and dried flowers.

If defensible space is a consideration in your landscape, you may need to select, place and maintain your grasses differently. For more information on landscaping for defensible space, please refer to UNCE's Fact Sheet on Firescaping (Fact Sheet 01-33).

If you do cut back your grasses, cut them back to within a few inches of the ground. However, some cool-season grasses do not recover well if cut back too far. It is a good rule of thumb to cut back cool-season grasses to two-thirds of their mature height. In a small garden, hand-held pruners will work well for most cutting. Grasses with soft foliage can be cut using a string trimmer. Tough, tall perennial grasses can be cut back by a weed trimmer with a saw blade attachment. Some grasses develop thick canes with lots of silica in the foliage, which can quickly dull blades.

Spring-blooming grasses often have unsightly spent blooms by midsummer that should be cut off. A few grasses, especially the rye grasses, can be sheared several times in the same season to force new growth. Shearing the grass in midsummer forces fresh growth for the late season and may decrease the incidence of insects and diseases.

Some grass-like plants, such as rush (*Carex* spp.), should not be cut back, but should be "combed" to remove dead tissue. Combing can be done by stroking the plant with a gloved hand to release dead tissue. Fine-textured grasses, such as blue fescue and fountain grass, can also be combed when overall shape retention is desired rather than the sheared look. This requires more maintenance, but will protect the overall growth habit of the mature plant.

Staking

Floppy grass foliage and flower stems are often caused by insufficient light, overfertilization or an excessive amount of nitrogen. Use metal stakes in or near the clump of a large floppy grass. Smaller grasses can be supported using wire loops or other types of vegetable or perennial supports.

Dividing and Transplanting

Many grasses require thinning or dividing to keep them looking their best (Fig. 3). Warm-season grasses are best divided in late winter or early spring. Cool-season grasses can be divided in fall, winter or early spring. The best time to divide is usually when new growth begins. Cut the foliage back to one-fourth to one-third in order to reduce moisture loss. Dig up the plant using a shovel and divide it using two spading forks. Insert the forks back to back into the root ball, and then pry them apart. You should end up with two cleanly divided halves (Fig. 4). Be sure to keep some soil on the root balls and keep the plants moist until you are ready to transplant them.

Figure 3. This grass has a dead center and needs division. Photo by Kerrie Badertscher.

Figure 4. This grass has been divided using two spading forks. Photo by Kerrie Badertscher.

Weed Control

The internal biological components of ornamental grasses are assembled differently than other flowering plants. These differences make them susceptible to harm by many herbicides. Since ornamental grasses can easily succumb to herbicides applied in their general vicinity, it is best to hand-pull or mechanically remove weeds that are near them.

Invasive Grasses

Only a small percentage of grasses have the potential to be weedy, but it is important to know if a plant is on the noxious weed list in Nevada. Bringing in plants or seeds from outside of the state may introduce an unwanted species. Avoid plants with labeling that states, "grows aggressively, resows readily, or colonizes," or similar descriptions. These plants may become maintenance problems. If you are concerned about a particular plant, seek advice from Cooperative Extension's horticulture experts.

Pests and Diseases

Generally, pests and diseases are not big issues with ornamental grasses. However, when spring is particularly moist, rust (a fungus) can occur. Simply remove the affected tissue and destroy it. Avoid composting diseased tissue.

Animals may be drawn to ornamental grasses. Rabbits, deer, horses, voles and other critters may forage on various species. If this is a nuisance, contact the Department of Agriculture for management strategies.

Using Grasses Within the Landscape

Incorporating ornamental grasses in your garden can add year-round color and texture, and winter interest. Consider using shorter ornamental grasses as a border toward the front of a perennial bed, and larger ornamental grasses as background plants. When selecting a species to add to your garden, consider the form, habit, height, foliage color, foliage texture, and timing and appearance of the flowers. Some ideas on how to incorporate ornamental grasses in your landscape include:

Container gardens

- Useful for patios and urban gardens, including rooftop gardens
- Excellent landscape statement

Rock gardens

- Miniature plants
- Alpine favorites
- Lend scale to the garden

Water gardens

- Soften edges
- Lend vertical visual interest in ponds

Wildlife or native gardens

- Ornamental value
- Wildlife food source
- Native and nonnative choices available

Craft (drying or fresh use)

- Fresh or dried arrangements
- Weaving for baskets

Culinary

- Wild rice used by first Americans
- Used in flavorings for various cuisines, such as lemon grass in Thai food

Meadows

- Native plants available for use in semiarid regions
- Wildlife habitat

Other Design Considerations

- Group or mass plants together to create a greater impact in the garden
- Group together plants with similar maintenance and irrigation needs to minimize maintenance efforts.
- Consider visual interest, especially for the winter
- Create attractive color schemes

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