### University of Idaho Extension

## Ornamental Grasses for Idaho Landscapes by Stephen L. Love and Thomas Salaiz photos by Stephen L. Love, University of Idaho

### Introduction

Ornamental grasses differ from other more common grasses used in lawns or pastures only in being chosen for their attractive form and color. They have been used from ancient times to beautify landscapes in old-world places such as China and Japan. They are quickly becoming irreplaceable landscape elements in many parts of the United States. In Idaho, ornamental grasses are just beginning to increase in popularity. Many beautiful grasses are adapted to Idaho climates and soils, and they have unlimited potential for enhancing landscapes.

Ornamental grasses vary widely in size, shape, conformation, and color. Some grow best in cool weather, others in hot. A few will grow in shade. Some spread from rhizomes and will fill in large areas, while most are clump-forming and stay confined. There are xeric grasses that can grow in very dry conditions without irrigation and moisture-tolerant grasses that grow in boggy places. Some ornamental grasses have a stiff, upright growth habit, while others virtually lie on the ground.

This incredible diversity means ornamental grasses can be used to create many effects in the landscape. They can be used in places that are typically given to shrubs, perennials, or annuals. At the same time, their vertical form, ability to provide motion and sound, and ability to create purposeful disharmony make grasses uniquely valuable as accent elements in landscape design.



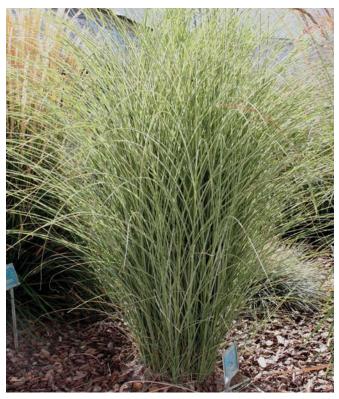
Figure 1. Northern Sea Oats is an unusual and attractive grass that grows well in dry shade.

#### **Uses in the landscape**

Plants in the landscape are placed to provide specific effects or accomplish specific objectives. This also is true of ornamental grasses. Effective uses include:

*Specimen:* Tall, imposing grass species can be placed in a prominent place in the landscape to draw the eye and serve as a focal point. Those with persistent seed heads can serve the dual purpose of accent plant (complement or contrast with surrounding plants) in the summer and dominant specimen plant in winter.

*Accent:* Due to their unique forms, textures, and colors, grasses are perfect for providing complementary or contrasting effects when mixed with other plants. They can also soften the strong horizontal lines created by fences, walls, or other structures.



**Figure 2.** 'Morning Light' is one of the Japanese Maiden Grasses that is hardy throughout much of Idaho.



**Figure 3.** Reed Canary Grass produces rhizomes, resulting in an invasive growth habit. This characteristic makes it useful for stabilizing soil.

*Screening:* Tall grasses can be used for much of the year to provide privacy or hide unsightly objects. Smaller grasses are effective for concealing foundations. Because grasses are seasonal in growth habit they may need to be cut back each spring, reducing their effectiveness as a screen. Where this is not an issue, they can be used very effectively.

*Soil stabilization:* Fibrous root systems make grasses very effective at preventing soil erosion. When combined with inherent toughness, longevity, and attractiveness, their ability to hold soil makes them extremely valuable. The best grasses for erosion control create dense populations as they spread by rhizomes.

## Important characteristics to consider when choosing ornamental grasses

The diversity of grass forms, colors, and growth habits gives rise to difficult choices when placing them in the landscape. These choices can be made easier by systematically reviewing characteristics based on the specific need. Some of the important characteristics to consider include:

*Size:* The mature size of a grass species usually dictates use. Small grasses are best used in the front of beds and borders, or as container plants. Medium-sized grasses are effective behind other plants in the back of borders or mixed with appropriately sized shrubs and other herbaceous plants. Large grasses make good specimen plants or screening materials.

*Color:* The leaves of ornamental grasses come in many shades of green and blue, with some being variegated white or yellow. Some produce seed heads that are purple, red, pink, or silver. Many also change color in the fall, thereby adding hues of pink and red. When planting grasses for color, consider how they will complement or contrast with other landscape elements.

*Winter value:* One of the best uses of ornamental grasses is to provide winter beauty when other plants are less attractive. Grasses planted for this purpose should hold

### Grasses recommended for specific uses

### Short grasses suitable for the front of beds and borders

Autumn Moor Grass Blue Fescue (Fig. 5) Blue Moor Grass Blue Sedge Idaho Blue Fescue Leatherleaf Sedge Quaking Grass Side-oats Grama

#### Grasses for dry sites or xeriscaping

Alkali Sacaton Blue Oat Grass Giant Sacaton Indian Grass Little Bluestem Side-oats Grama

#### Grasses that add color to the landscape

Blue Fescue (Fig. 5) Blue Oat Grass Blue Sedge Fountain Grass Idaho Blue Fescue Little Bluestem Love Grass Pink Muhly Reed Canary Grass Switchgrass

#### Grasses adapted to shade or part shade

Blue Sedge Northern Sea Oats Palm Sedge Quaking Grass Reed Canary Grass

#### Grasses that provide winter beauty

Feather Reed GrassJapanese MaidenGiant SacatonGrass (Figs. 2,4)Indian GrassRavenna GrassSwitchgrass

#### Grasses suitable for container gardening

Atlas Fescue Autumn Moor Grass Blue Fescue Blue Moor Grass Blue Sedge Feather Reed Grass Idaho Blue Fescue Korean Reed Grass Leatherleaf Sedge Palm Sedge Quaking Grass Tufted Hair Grass

### Grasses for use as groundcovers or for erosion control

Alkali Sacaton Atlas Fescue Indian Grass Little Bluestem Northern Sea Oats (Fig. 1) Palm Sedge Reed Canary Grass (Fig. 3) Side-oats Grama Switchgrass Tufted Hair Grass

#### Grasses for use around water features

Blue Sedge Leatherleaf Sedge Palm Sedge Reed Canary Grass



Figure 4. Tall grasses, such as the Japanese Maiden Grass 'Malepartus', make wonderful specimen plants.

their seed heads through the winter, and their leaves should be stiff and upright to shed snow.

*Adaptation:* Grasses differ in their response to climate, soil type, and moisture conditions. They should be adapted to general conditions as well as to the intended use. In SE Idaho, grasses should be able to survive in a USDA hardiness zone 4 and withstand alkaline soils. Grasses planted in SC and SW Idaho need hardiness rated at zone 5 or 6 and also need tolerance to alkaline soils. Most of N Idaho has a wetter climate, acid soils, and winter cold rated primarily as zone 5, or occasionally zone 4. Some high elevation areas of the central mountains and extreme SE part of the state have very short growing seasons and may be considered zone 3 for hardiness considerations.

*Growth type:* Grasses fall into two major categories, warm-season or cool-season. Warm-season grasses are slow to green up in the spring but produce attractive seed heads in late summer or fall. Cool-season grasses are attractive in spring but often go partially dormant in the heat of summer, thereby reducing their attractive-ness until they resume active growth in the fall. Choose grasses with the appropriate growth type to complement the growth habit of companion plants.

*Invasiveness:* Most ornamental grasses are clump-forming, meaning they do not spread. A few are rhizomatous, meaning they aggressively expand to fill the available space. Spreading grasses should be used only where they can be contained or where a spreading habit is an advantage. Invasive grasses that spread by rhizomes can be controlled by planting them in a barrel or other container that has been buried in the ground.



**Figure 5.** Small grasses, such as the Blue Fescue 'Nefer', make outstanding additions to beds and borders and also grow well in a container.

A few ornamental grasses produce abundant viable seed and spread invasively as the seedlings emerge and grow. This avenue of spread is difficult to stop, and control usually requires diligent cultivation or herbicide applications. Two grasses that have shown a tendency to produce seedlings are ponytail grass (*Nassella tenuissima*) and Ravenna grass (*Erianthus ravennae*). In areas with shorter seasons, outside of the valleys of SW Idaho, Ravenna grass does not develop significant quantities of viable seed due to the short growing seasons and is less problematic.

See Table 1 for descriptions of ornamental grasses that have proven themselves adapted to Idaho growing conditions.

# Planting and caring for ornamental grasses

One of the tremendous advantages ornamental grasses have over many other plants in the landscape is their ability to look nice with minimal maintenance. They have few insect or disease problems and require limited inputs of fertilizer and water.

#### Planting

With the exception of a few moisture-loving species, grasses need well-drained soil. Avoid areas that are prone to flooding. Addition of compost or other organic matter prior to planting can improve drainage.

Ornamental grasses should typically be planted in spring. This gives them time to store energy needed to survive their first winter.

Most ornamental grasses are propagated from cuttings, while a few are grown from seed. Propagation is usually done by nursery growers who supply plants in pots. Potted plants are usually small and have a limited root system.

Plant grasses at the same depth as they were growing in the pot. Irrigate frequently and lightly for the first two weeks; then slowly reduce the amount of added water until (one to two months later) the irrigation schedule matches the surrounding landscape. Avoid overwatering (ideally moist but not soggy) during the establishment period as this will result in root rot and death of young plants. Table 1. These ornamental grass species and cultivars are adapted to Idaho climate and soil conditions. This list of grass species and varieties is far from comprehensive. Many others are adapted, attractive, and useful. Careful study and/or experimentation will help you add to your list of favorite grasses.

<b>Common Name</b>	Varieties	Scientific Name	<b>USDA Zones</b>	ldaho Regions	Size	Growth & Habit	Uses	Description
Alkali Sacaton	None	Sporobolus airoides	4-7	SW, SC, SE	SM	Clump/Warm season	Acc, Mas, Sta	Sparse foliage topped in midsummer with sparkling, airy seed heads; very drought tolerant; effective in mass plantings
Atlas Fescue	None	Festuca mairei	4-7	N, SW, SC, SE	Σ	Clump/Cool season	Acc, Sta, Con	Largest of the fescues; needs space to develop; dark green leaves; tall light-tan seed spikes; thrives in the heat
Autumn Moor Grass	None	Sesleria autumnalis	9-tc	AII	MS	Clump/Cool season	Acc, Con	Unusual lime-colored leaves that look worn in summer heat; attractive seed heads appear late in the summer
Blue Fescue (Fig. 5)	Azurit, Elijah Blue, Boulder Blue, Nefer	Festuca glauca	9 °E	AII	S	Clump/Warm season	Acc, Con	Diminutive grass for beds, borders, containers; many varieties with green-gray to silver-blue leaves; attractive early but fade in the heat of summer
Blue Moor Grass	None	Sesleria caerulea	3-7	N, CM, SE	S	Clump/Cool season	Acc, Con	First grass to green in the spring; dark green attractive leaves; plant fades in the summer but recovers in fall
Blue Oat Grass	None	Helictotrichon sempervirens	3-7	AII	ML	Clump /Cool season	Spe, Acc	Globe form; radiating bright blue leaves; season-long interest; very attractive; moderately drought tolerant
Blue Sedge	Blue Zinger	Carex glauca	3-7	AII	S	Clump/Cool season	Acc, Con	Attractive all year; blue green leaves are floppy and tend to lie flat; prefers moist soil; effective near water features
Feather Reed Grass	Karl Foerster, Avalanche, Overdam	Calamagrostis x acutiflora	3-7	AII	Σ	Clump/Cool season	Spe, Acc, Con	Common but outstanding grass; greens early; numerous upright light-tan seed heads; retains form in winter
Fountain Grass	Karley Rose,Tall Tails	Pennisetum orientale	4-7	N SW SC SE	Σ	Clump/Warm season	Acc	One of the few hardy fountain grasses; dark-green leaves; fox-tails of bright pink flower heads
Giant Sacaton	None	Sporobolus wrightii	4-7	SW SC SE	_	Clump/Warm season	Spe, Scr	Tall grass with light-green leaves and feathery pink seed heads; prefers dry sites
Idaho Blue Fescue	Siskiyou	Festuca idahoensis	3-6	AII	S	Clump/Cool season	Acc, Con	One of the prettiest blue fescues; mound of bright blue-gray leaves; holds relatively well in the heat
Indian Grass	Indian Steel	Sorghastrum nutans	3-7	AII		Clump/Warm season	Spe, Mas, Sta	Grows a low mat of leaves that give rise to tall, dark- brown seed heads; very drought tolerant
Japanese Maiden Grass Also known as Eullalia or Japanese Silver Grass (Figs. 2,4)	Hardiest varieties Adagio, Gracillimus, Kaskade, Malepartus, Morning Lights	Miscanthus sinensis	4-7	N SW SC SE		Clump/Warm season	Spe, Scr	Maiden grasses are among the most beautiful; display feathery flower heads and/or fascinating texture; not all varieties will survive zone 4; varieties listed on this line are the hardiest maiden grasses
Japanese Maiden Grass Also known as Eullalia or Japanese Silver Grass (Figs. 2,4)	Tender varieties Ferner, Osten, Graziella, Sarabande, Silberfeder, Strictus	Miscanthus sinensis	6-7	W SC		Clump/Warm season	Spe, Scr	Various forms of maiden grass with tall growth habit and beautiful flower heads; varieties listed on this line are more tender and best planted in the warmest areas of Idaho

Japanese Maiden Grass Also known as Eullalia or Japanese Silver Grass (Figs. 2,4)	Small varieties Bluetenwonder, Little Kitten, Yaku Jima	Miscanthus sinensis	5-7	SWSC	Σ	Clump/Warm season	Acc, Spe	Small varieties of maiden grass, mostly under 4' tall; late summer flowers with feathery heads; most adapted only to the warmest places in Idaho
Korean Reed Grass	None	Calamogrostis brachytricha	4-7	N SW SC SE	M	Clump/Cool season	Acc, Spe, Con	Similar to Feather Reed Grass but has fewer, larger, pink seed heads, attractive for a long period
Leatherleaf Sedge	Red Rooster	Carex buchananii	4-7	N SW SC SE	MS	Clump/Cool season	Acc, Con	Permanent bronze coloration; unique plant for the right place; stiffly upright; can withstand wet soils
Little Bluestem	Blaze, The Blues	Schizachyrium scoparium	3-7	AII	SM	Clump/Warm season	Acc, Mas, Sta	Unique grass that grows gray-green leaves to the top of the flower stalk; turns reddish-pink in fall; prefers dry sites
Love Grass	None	Eragrostis trichodes	4-7	N SW SC SE	Σ	Clump/Warm season	Acc, Spe	Like a smaller version of switchgrass; bright pink flower spikes barely rise above dark-green leaves. Moderately drought tolerant
Northem Sea Oats Spangle Grass (Fig. 1)	None	Chasmanthium latifolium	3-6	All	MS	Clump/Cool season	Acc, Sta, Sha	A lax grass with large, drooping, attractive seed heads; can grow very well in dry shade
Palm Sedge	Oehme	Carex muskingumensis	4-7	All	MS	Spread/Cool season	Acc, Sta, Mas, Sha, Con	Attractive bamboo-like foliage; spreads slowly; prefers moist soil; effective on a moist bank or near water
Pink Muhly	Lenca	Muhlenbergia capillaris	5-7	SW SC	×	Clump/Warm season	Acc, Sta	Dark-green leaves; late summer flower spikes of vibrant pinkish-red; prefers warm sites
Quaking Grass	None	Briza media	3-6	All	MS	Clump/Cool season	Acc, Con, Sha	Early developing dark-green leaves; unique seed heads rustle in the wind; wanes in summer heat
Ravenna Grass	None	Erianthus ravennae	5-7	N SW SC	L	Clump/Warm season	Spe, Scr	Very tall, upright, dominant specimen grass; best used where its vertical lines complement surroundings; needs warm spot in zone 4. May spread by seed in warmer areas of Idaho
Reed Canary Grass Ribbon Grass (Fig. 3)	Strawberries n Cream	Phalaris arundinacea	3-7	All	Σ	Spread/Cool season	Acc, Mas, Sta, Sha	A vigorously spreading grass that can become invasive; very attractive foliage with striped leaves and pinkish overtones; prefers moist soil
Side-oats Grama	None	Bouteloua curtipendula	3-7	All	MS	Clump/Warm season	Acc, Mas, Sta	Light gray-green leaves; oat-like flower heads produced throughout the summer; very drought tolerant
Switchgrass	Dallas Blues, Heavy Metal, Rostrahlbusch	Panicum virgatum	3-7	All	ML	Clump/Warm season	Spe, Scr, Mas, Sta	Versatile grass; moderately tall with airy, pink seed heads in late summer; 'Heavy Metal' and 'Dallas Blues' are more upright
Tufted Hair Grass	Gold Dust, Bronzeschleier	Deschampsia caespitosa	3-6	All	Σ	Clump/Cool season	Acc, Mas, Sta, Con	Dark-green leaf mats; sparkling, gold, hair-like flower heads; prefers moderately moist sites

Kay USDA Zones Refers to plant hardiness zones. As a rule, hardiness zones in the five major regions of Idaho are as follows: (N) Northern Idaho, zones 4-5 (except Lewiston which is zone 6-7 and more similar in climate to SW Idaho); (CM) Central mountains, zones 3-4; (SW) Southwestern Idaho, zones 5-6 (possibly 7 in a few spots); (SC) South-central Idaho, zones 4-5; (SE) southeastern Idaho, zones 3-5, depending on elevation.

Idato Regions Indicates the regions within Idaho where these grasses are likely adapted. Abbreviations are defined in the USDA Zone section above.

Size Refers to the mature height of the plants, including the flower stalks: S=small (<22") MS=medium-small (12-24") M=medium (24-40") ML=medium-large (40-55") L=large (>55")

Growth & Habit Refers to growth characteristics. Grasses are clump-forming (do not spreading (possibly invasive and hard to manage). They are also either cool season (green early and grow best in cool weather) or warm season (green late, bloom in late summer or fall, and grow best in warm weather).

Uses Acc=accent grass used to complement or contrast with other plants or landscape elements. Con=good container plant. Mas=mass planting to fill relatively large spaces in the landscape. Scr=screening, used with intent to provide privacy or hide other features in the landscape. Sha=grows in partial shade. Spe=specimen grass used as a dominant, eye-catching feature in the landscape. Sta=grasses useful for erosion control or to stabilize slopes.

5

Most ornamental grasses must be planted where they receive full sun. Only those listed as shade tolerant will remain healthy and look nice under shady conditions.

#### **Fertilization**

Ornamental grasses need very little fertilizer. They should receive a small amount of a starter fertilizer at planting. Once established, they should be fertilized only when they show obvious symptoms of deficiency, such as smaller than expected size, lack of vigor, and yellowish leaf color.

#### Irrigation

In general, ornamental grasses are more deeply rooted and need less water than lawn grasses. Irrigate less frequently and more deeply than you would for a lawn. Actual water requirements are heavily dependent on the grass species. Some will need only a few irrigations in an entire summer, such as those listed above as suitable for dry sites. Others will need water almost weekly. Additional research may be needed to determine best irrigation practices.

Many ornamental grasses are susceptible to rust diseases that make the leaves unattractive, even if the symptoms do not include a decline in overall plant health. These diseases are worse when leaves are moistened with overhead irrigation, so the best method of watering is with a drip system.

#### **Seasonal Care**

It is essential to annually cut back ornamental grasses to encourage new growth and keep them looking attractive. Early spring is the best time to complete this task because the old growth is best left on the plants through winter to help protect the crowns. Cut away and remove all dead stems as low to the ground as possible without damaging the living crowns. This usually means leaving stubble about 3- to 5-inches tall. Hand pruners, power shears, or string trimmers make good tools for cutting back grasses.

Some grass species suffer from center-dieback after several years of growth. This occurs as the clump expands, the center portion of the plant ages and dies out, leaving a donut-shaped plant. This can be solved by digging up the grass in early spring (taking as much soil with the roots as possible) and dividing the crown. Cut the plant into four or five pieces and replant the largest and healthiest portion into the same spot. Use the other divisions to start plants elsewhere in the landscape. Even if center-dieback is not evident, crown division can be used to reduce the size of a grass clump or to propagate an attractive plant for use in other sites.

### About the authors

**Stephen L. Love** is a Community Horticulture Specialist in the Department of Plant, Soil, and Entomological Sciences at the University of Idaho Aberdeen Research and Extension Center. **Thomas Salaiz** is a research support scientist at the University of Idaho Aberdeen Research and Extension Center.

Issued in furtherance of cooperative extension work in agriculture and home economics, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Charlotte V. Eberlein, Director of University of Idaho Extension, University of Idaho, Moscow, Idaho 83844. The University of Idaho provides equal opportunity in education and employment on the basis of race, color, national origin, religion, sex, sexual orientation, age, disability, or status as a disabled veteran or Vietnam-era veteran, as required by state and federal laws.

© 2009 by University of Idaho

All Rights Reserved