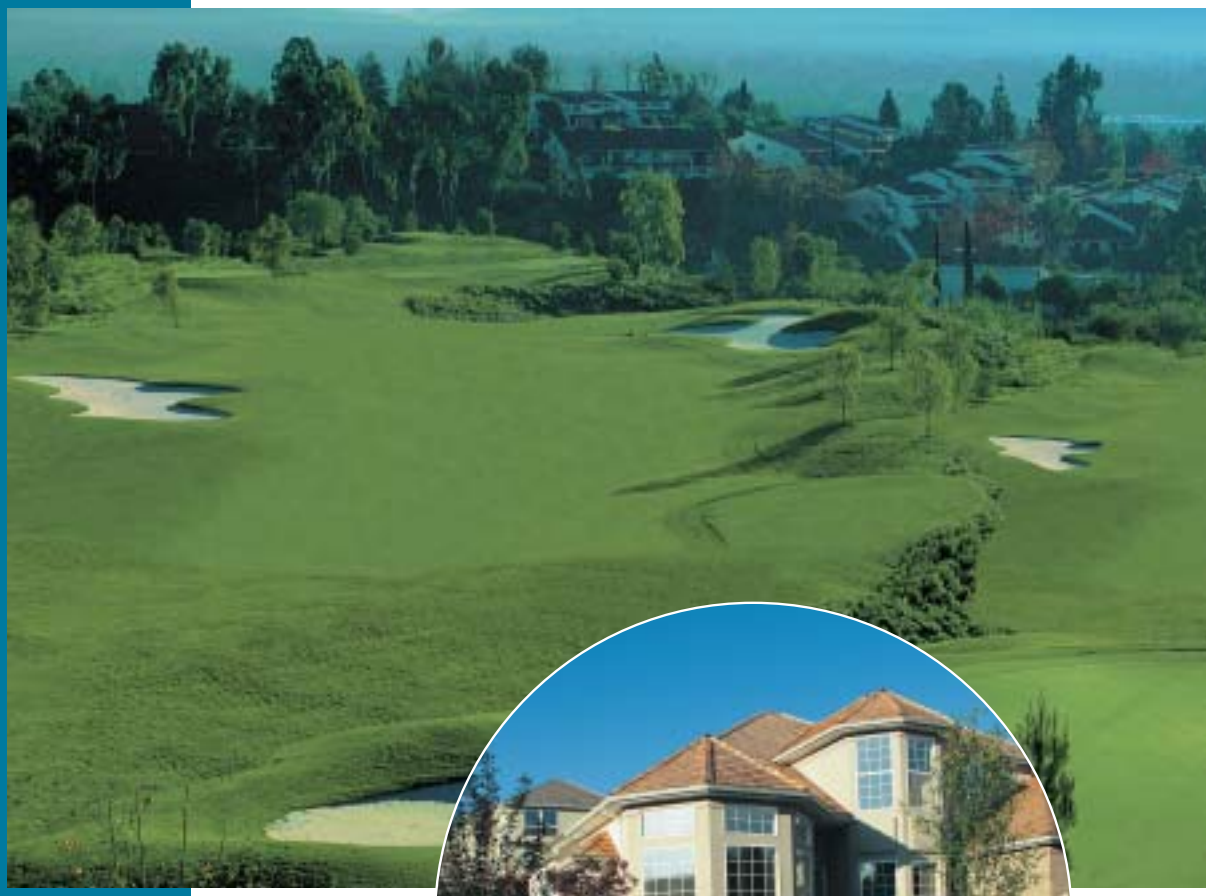
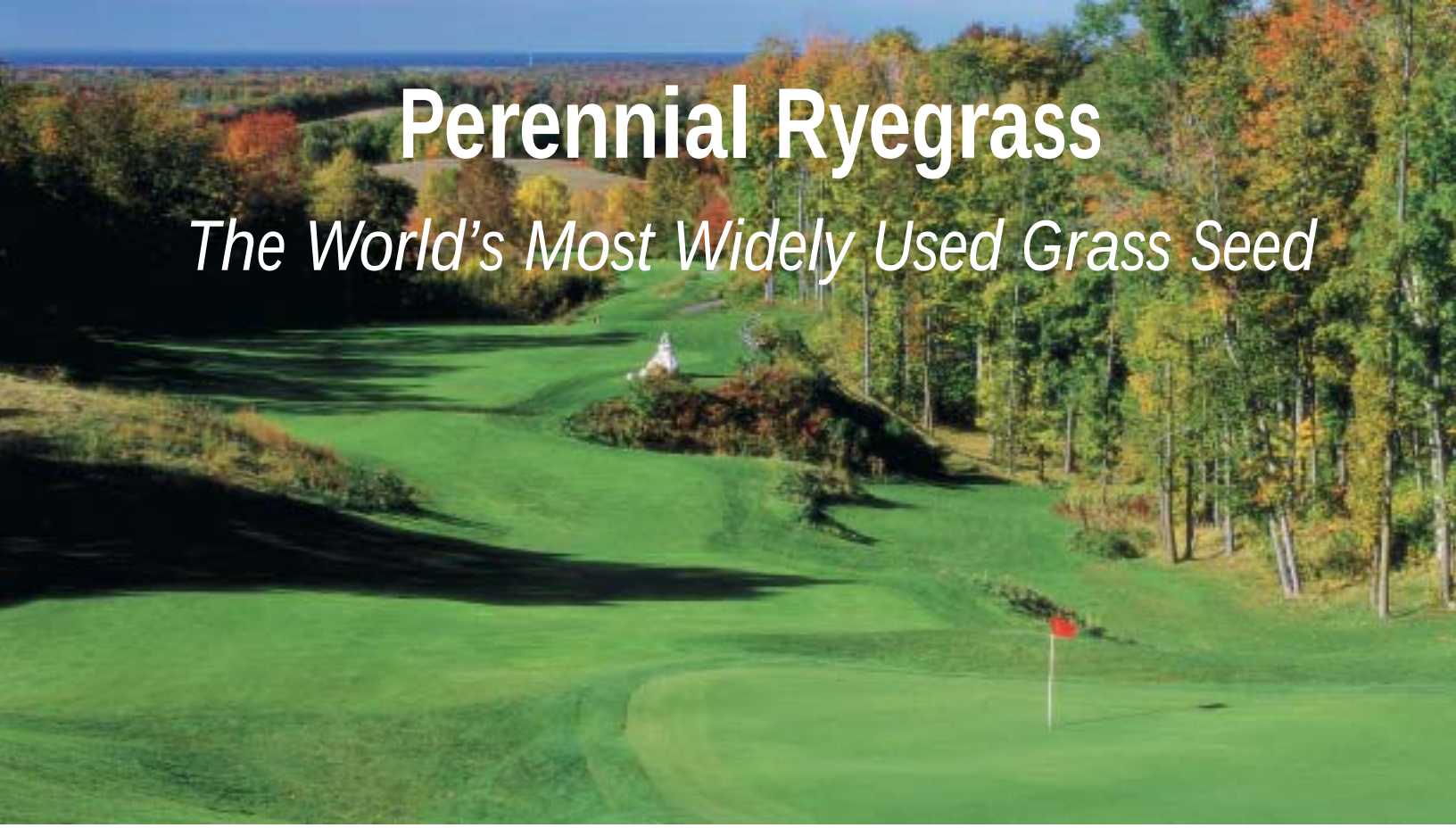
Oregon-Grown Quality Seed

Perennial

Perennial RYEGRASS



The All-Around Answer for World-Class Turf & Forage



Perennial Ryegrass

The World's Most Widely Used Grass Seed

No Grass Can Equal Perennial Ryegrass in its Ability to Rapidly Produce Thick, Durable Turf and Forage

Perennial Ryegrass is the world's most widely used grass and its ability to germinate in 7-10 days (even less under ideal conditions) is legendary. A cool-season grass, Perennial Ryegrass is widely used in northern regions for permanent turf and forage pastures and for the overseeding of dormant grasses in the southern United States.

Perennial Ryegrass is preferred by home owners because it produces a dark green turf which rapidly develops a strong root system, responds rapidly to fertilization and is not subject to disease problems which plague many other grasses.

Because Perennial Ryegrass does not creep, as do some grasses, it is often combined with quality fine fescues and bluegrass to produce fine turf with the advantages of genetic diversity.

Perennial Ryegrass performs in a wide variety of soil types and will do well in clay or compacted areas that are not subject to heavy use.

Perennial Ryegrass is especially popular for sports turf and has been used in most every premier sporting event including the Super Bowl, World Series, World Cup Soccer, Olympics and golf.

Oregon-Grown Turf-Type Perennial Ryegrass is a Versatile Grass

Available to consumers are numerous very high quality, dark green, fine-bladed turf-type Perennial Ryegrasses which are marketed by brand name as well as Linn Perennial, a "workhorse" variety which is lighter green and has broader blades.

For show quality turf, professional groundskeepers select from modern fine-bladed "proprietary" varieties of Oregon-grown Perennial Ryegrass. All are dark green, disease-resistant, winter-hardy and fast germinating.

Rights to distribution and reproduction of seed from proprietary turf-type varieties are owned by individual firms and are advertised and sold by brand name.

Linn Perennial Ryegrass is a public variety that is fast-

germinating, hardy and has broader, brighter green blades than most proprietary varieties.

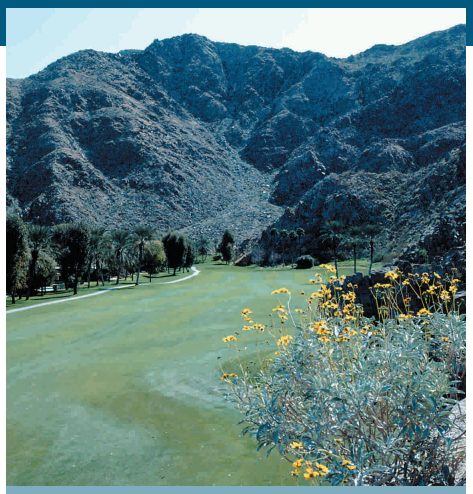
Turf-type Perennial Ryegrasses have shown the ability to thrive at any height ranging from 3/16 inch on putting greens or up to 1 1/2 inches for other uses.

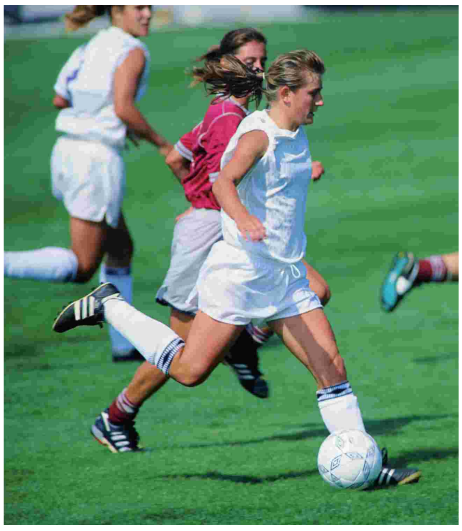
Normally, turf-type Perennial Ryegrass will germinate in 7-10 days, quickly develop a strong root system, mow cleanly, tolerate limited exposure to very high temperatures and respond rapidly to fertilization. Perennial Ryegrass is commonly used to winterseed greens, tees, fairways and roughs in southern "Bermudagrass" country. In this use they have shown remarkable ability to hold color and quality during cold snaps and maintain turf of excellent color and quality throughout the winter. In northern regions the turf-type Perennial Ryegrasses are used for permanent turf on virtually every area of the golf course including fairways, roughs, tees and greens.

While Linn Perennial Ryegrass has been used to winterseed dormant southern turf, it is most often found in the North where the production of turf of exceedingly high quality is not a requirement.

Fertilization Requirements

An annual application of 3-5 lbs. of nitrogen per 1,000 square feet is recommended for all of the Ryegrasses. Application is usually most effective when applied in equal parts in the spring and fall. In some regions an application of phosphorus and potash may be desirable to maintain quality. When Perennial Ryegrass is close-cut and intensely managed (as on a putting green), a doubling of the rate of nitrogen is recommended. A soil pH of 6.5 is ideal for Ryegrass, but it will also perform in a range of 5.5 to 8.5.





Seeding Rates

Seeding rates will vary according to specific needs, density desired and personal experience and preference. In general, the following seeding rates are recommended for the various golf course greenways.

Fairways: 350 - 400 pounds Perennial Ryegrass per acre

Winter Overseeding:

Bermudagrass Golf Greens 30 - 40 pounds per 1,000 sq. ft.

Golf Tees, Perennial Ryegrass 5 - 10 pounds Perennial Ryegrass per acre

Approximate Perennial Ryegrass seeds per pound: 260,000

Germination: Approximately 7-10 days (less under ideal conditions)

Oregon-Grown Perennial Ryegrass:

Without Question the Finest Source of Nutritious Pasture

Oregon forage-type Perennial Ryegrass (*Lolium perenne*) is a proven performer in the development of prime permanent pasture in the northern area of the United States. A tall pasture grass, it is known as a worldwide temperate to semi-temperate cool-season grass.

Perennial Ryegrass is one of the most widely used grasses and is adaptable to a wide variety of soils and climatic conditions.

Perennial Ryegrass is highly regarded as a source of both forage and hay. With a leafy head and fine stem, it is considered very palatable.

Winter growth is lush in areas where winters are moist and mild, but it comes on strongest in the spring and fall. As a general rule, it will be at its best in temperatures which do not go below 25-35º for extended periods. Although it will not tolerate extended periods of extreme cold, snow cover will give Perennial Ryegrass adequate protection at lower temperatures.

Perennial Ryegrass will tolerate limited exposures to very high temperatures and low moisture, but will not do well in regions where summer temperatures are in excess of 90º for extended periods of time.

Seeding Rates and Seedbed Preparation

Oregon Perennial Ryegrass is one of the easiest grasses to establish. It may be sown on clean-burned stubble or land not plowed or otherwise prepared in either unfavorable wet or dry conditions. It will quickly develop a strong root system and under good conditions will provide light grazing in 90 days or less.

Recommended seeding rate for establishment of pasture is 25-35 pounds per acre. Lower rates are recommended when sown in combination with legumes or small grains.

Perennial Ryegrass growth is most rapid when sown in either fall or early spring. In regions where winters are long and severe it is recommended that it be sown in spring.

Disease Tolerance

Perennial Ryegrass is not particularly subject to disease or insect infestation that cannot be treated with modern pesticides.

Recovery from Injury

A vigorous grass, it will recover rapidly from heavy grazing and shows superior ability to withstand and bounce back from trampling.

Fertilization

Perennial Ryegrass responds rapidly to fertilization. Its principal nutrient is nitrogen, which is normally applied at the rate of 150 pounds per acre. Under some circumstances potash and phosphorous will bring good response in some areas.

Germination

A very rapid starter, Perennial Ryegrass will normally germinate in 7 to 14 days or even less under ideal conditions. When left uncut, it will grow to a height of 1 1/2 to 3 feet and yet will not become stemmy and unpalatable.

Silage and Hay

Perennial Ryegrass often is harvested for silage. It makes up a considerable portion of dairy-quality grass silage in many U.S. growing regions.

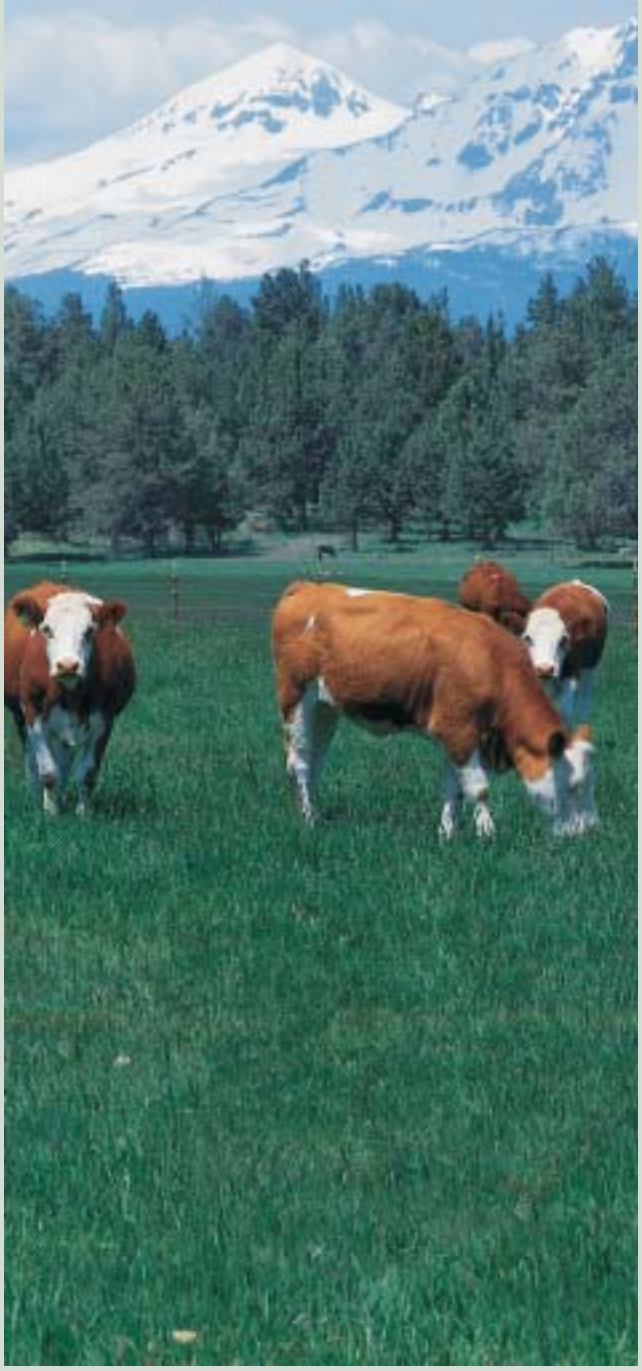
As with all forage species, silage quality is influenced greatly by maturity stage. For the optimal compromise between quality and quantity, Perennial Ryegrass is cut in the boot stage.

Nutritional composition of Perennial Ryegrass.

Feed Description	TDN (%)	DE (Mcal/kg)	ME (Mcal/kg)	NEm (Mcal/kg)	NEg (Mcal/kg)	CP (%)	Ca (%)	P (%)
Fresh, early vegetative	80	3.50	2.87	—	—	19.0	0.65	0.40
Fresh, late vegetative	72	3.15	2.58	—	—	16.0	—	—
Fresh, heading	60	3.00	2.46	1.57	0.97	10.4	0.55	0.27
Hay, sun-cured, early vegetative	64	2.82	2.40	1.41	0.78	8.6	0.65	0.32

All values expressed on a dry matter basis. TDN=Total Digestible Nutrients; DE=Digestible Energy; ME=Metabolizable Energy; NEm=Net Energy for Maintenance; NEg=Net Energy for Gain; CP=Crude Protein; Ca=Calcium; P=Phosphorus.

TDN values are listed for ruminants. Values for horses generally are lower.



Pasture Advantages

- Highly nutritious hay or forage
- Germinates in 7 to 14 days
- Exceptionally palatable
- Economical to establish
- Little or no seedbed preparation
- Recovers rapidly from heavy grazing
- Withstands trampling
- Adapts to many soils and climates
- Always in good supply

Soil Conservation

Perennial Ryegrass is well suited to soil conservation uses. Its extensive, shallow, fibrous root system makes it effective for reducing soil erosion. It is recommended for use alone or as a fast-starting component in mixtures where it provides rapid cover and allows longer-lived or more winter-hardy species to become established.

Wildlife

Perennial Ryegrass also is useful as wildlife feed. Geese, coots, widgeons and other ducks, wild turkeys, rabbits, deer and elk graze this forage. Quail and songbirds such as the white-crowned sparrow, golden-crowned sparrow, Savannah sparrow and brown towhee feed on seeds, as does the pocket mouse.

Pasture Establishment

Perennial Ryegrass can be seeded in spring or late summer. In addition, it may be fall-seeded in areas with mild winters. Seeding depth should be between 0.25 and 0.5 inch. When seeding with legumes, 0.25 inch is preferred.

When broadcasting, increase seeding rates by 50 percent or more, depending on seedbed condition. When renovating, mow or graze the existing sod short to reduce competition.

Cutting and Grazing Management

Cutting and grazing management greatly influences forage quality, productivity and persistence. Quality is most affected by maturity stage at harvest. To obtain high-quality preserved forage (silage or hay), harvest Perennial Ryegrass at the early boot stage. For silage, let plants wilt prior to ensiling. Lower water content will reduce effluent losses from silos.

In the Pacific Northwest, four to six harvests are possible. With a five-cutting system, typical percentage yield distribution is 40, 18, 15, 12 and 15. Later maturing varieties may delay harvest by 10 to 14 days, but seldom enough to avoid poor haying weather. Alternatively, the first harvest may be grazed, green chopped or ensiled. To stimulate growth, fertilize immediately following the initial harvest.

Perennial Ryegrass can withstand close, frequent grazing and, thus, is ideally suited for intensive sheep and cattle grazing systems. The diploid varieties in particular tolerate treading well.

Portions of this brochure were adapted from Oregon State University Extention Service, PNW 501, April 1999.

OREGON RYEGRASS
GROWERS SEED COMMISSION

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