

### MYTH IV

#### Having Large Grass Areas Is Detrimental To The Environment!

Having large grass areas enhances the environment. Grass has long been part of a healthy environment. Sod reduces runoff and sediment loss better than any man-made materials, such as wood excelsior, jute fabric, coconut fiber blanket, etc. (Krenitsky et al., 1998; Table 2). With today's ecological concerns, many more people are considering sod for its environmental benefits. Turf cools and cleans the atmosphere by reflecting the sun's heat and absorbing noises, carbon dioxide and other harmful pollutants. It releases valuable oxygen and moisture into the air we breathe. Turfgrass limits wind and water erosion. Turf acts as a natural filter, reducing pollution by purifying the water passing through its root zone. Grass areas provide a safe place for fun and games. As it grows, grass silently contributes to a healthier environment.

Table 2. Ground cover runoff and sediment loss.

Ground Cover	Time <sup>1</sup>	Rate <sup>2</sup>	Loss <sup>3</sup>
Sod	555	0.58	1
Straw	118	1.09	25
Bare Soil	38	1.46	252
Jute	76	1.22	24
Wood Excelsior	81	1.34	46
Coconut Blanket	70	1.27	33
Coconut Mat	96	1.38	51

<sup>1</sup> Time to runoff (min)

<sup>2</sup> Runoff rate (mm min<sup>-1</sup>)

<sup>3</sup> Sediment loss (g m<sup>-2</sup>)

### MYTH V

#### Sod Farming Depletes Topsoil.

Sod production is viewed by some people as a form of strip mining and a waste of a natural resource. An immediate impression is that topsoil is depleted with each harvest. The facts do not substantiate these concerns. The lower portion of harvested sod may appear to be soil, but is really a leafy portion attached to a thatch/root layer that normally measures ½ to ¾ inches thick containing a bit of soil. Turfgrass production improves farmland soil by adding organic materials and nutrients. Grass roots are continually developing, dying off, decomposing, and redeveloping. Organic matter keeps soil microbes active and improves soil chemical and physical properties.

Dr. C. Richard Skogley's research at the University of Rhode Island showed that when sod is harvested, most of the grass root system is left in the soil. He found that sod fields contained an average difference of 1.9% more organic matter. Work by Skaradowski and Sullivan found that sod production fields increased in organic matter with time. Assuming that a 6-inch depth of soil on an acre weighs 1,000 tons, then this represents 19 tons per acre return to soil. **Based on a five-year study, it could be concluded that the sod operation had added the equivalent of nearly four tons of organic matter to the soil each year.**

#### Literature Cited

Krenitsky, E.C., M.J. Carroll, R.L. Hill, and J.M. Krouse. 1998. Runoff and sediment losses from natural and man-made erosion control materials. *Crop Science* 38:1042-1046.

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Skaradowski, S. and W.M. Sullivan. 1995. The Effects of Commercial Sod Production on Soil Dynamics. *American Society of Agronomy*. Madison, WI. R.I. Agricultural Experiment Station #3186.

Skogley, C.R. and B.B. Hesseltine. 1978. Soil Loss and Organic Matter Return in Sod Production. University of Rhode Island, Kingston, RI

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## FIVE MYTHS OF USING SOD



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# FIVE MYTHS OF USING SOD

## MYTH I

### It Takes More Water To Establish Sod.

This myth may have something to do with the fact that a large amount of water is used immediately after the sod is installed. Watering will ensure close contact between the sod roots and soil, and will prevent the sod from drying out. Once the sod roots have firmly grown into the soil, then less water is needed. This usually takes about two to three weeks. In comparison, seeding requires very high quantities of water to achieve germination and establishment. Multiple daily applications are needed to maintain adequate moisture to prevent the seed from drying out quickly on bare soil. Seeding usually takes several months to establish a turf and thus more water is needed before the turf matures. **Therefore, sod has the lowest overall water requirements of all lawn establishment methods.**

Dr. Peacock (2001) studied minimum irrigation requirements for establishing turf from sod, seed, and hydro-seeding methods during the spring (Figure 1). He found when sod received 1.3 inches of irrigation and was then not watered for two weeks, that it maintained acceptable turf quality. The seeded and hydro-seeded turfs never showed acceptable quality without irrigation during the same period.

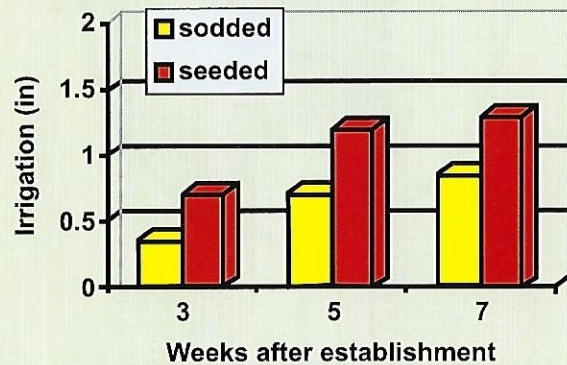


Figure 1. Irrigation requirements for seeded and sodded cool season turf to have same quality.

## MYTH II

### Sod Requires More Chemicals and Fertilizer.

Actually, less chemicals are used with sod, compared to using seed. Sod is a professionally grown, healthy and mature turf that is free of weeds and disease-causing pathogens. Less fertilizer is needed to root sod than is needed when establishing turf from seed. Properly grown sod has minimal amounts of weeds, therefore there is no need to apply herbicides. When establishing turf from seed, weed invasions occur because the soil is not free of weed seeds. Immature seedlings are also more susceptible to disease-causing bacteria and fungi than mature plants. Therefore, you will need to apply chemicals more often on seeded areas. **Sod has less weeds and less disease therefore requires less chemicals.**

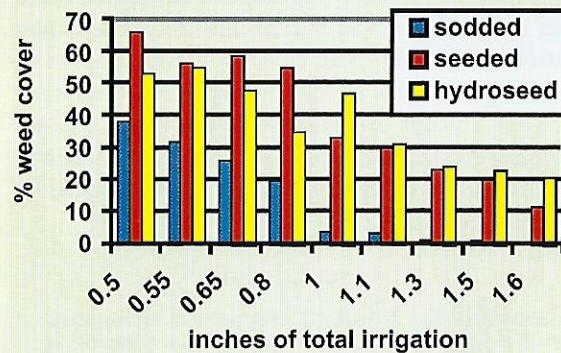
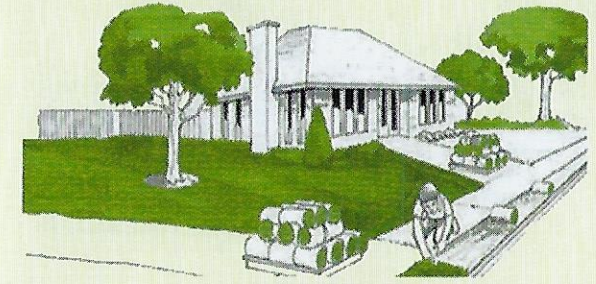


Figure 2. Percent weed cover as affected by irrigation volume at nine weeks after establishment in the spring.

Dr. Peacock (2001) demonstrated that weed pressure during spring establishment was severe in seeded and hydro-seeded turfs (figure 2). When 0.9 inches of irrigation was provided, sodded turf had few weeds, but seeded and hydro-seeded turfs had more than 30% weed cover. With this much weed cover, herbicides should be applied to control them.



## MYTH III

### Sod Is More Expensive Than Other Grassing Methods.

Sod is certainly more costly than the amount of seed that is needed for the same area. However, even the best seeding methods do not guarantee a uniform high quality turf. Higher management and maintenance costs, compounded by increased water and chemical applications, as well as delay of use, poor visually unappealing terrain are trade-offs for the lower initial seed costs. In the long run, seeded lawn costs are approximately the same as sod lawns. The costs of overseeding and reseeding washouts, more chemical applications to control weeds and disease and higher fertilizer needs all add to this. Seeding of golf courses delays the opening of the course for play. Golfers will not pay top dollar for a sparsely covered playing surface, and they will not accept stones and rocks near the surface that may damage their golf clubs. With turfgrass sod, you can begin play on a fairway in a relatively short time, usually, four to six weeks. Compared to seeding, this could mean hundreds of rounds of golf earlier, giving owners a quicker cash flow. Athletic fields can be used up to 11 months earlier when sod versus seeded fields are compared. Soil erosion cleanup is generally required with seeded turfgrass areas. **Sod has immediate visual impact, quickly stabilizes soil and is enjoyed up to 11 months earlier than areas prepared by seeding methods.**

Table 1. Cost, Time and Useful Life Comparisons

Cost Factor	Sod	Seed	Hydroseed
Planting	high	lowest	low
Time to Use	14-30 days	8-12 mo	7-12 mo.