

TURF

PUTTING SPRING IN YOUR STEP



Turf does more than just look pretty. It's estimated that a well-maintained landscape can add up to 15 percent to a home's value.

The rain has ended, and you're ready to head to work. If you hurry, you can run the bills to your mailbox and still make it to work on time. You grab the stack of envelopes, dash out the front door — and sink in mud up to your ankles.

That's what life would be like if you didn't have a lawn.

It's easy to overlook the obvious, and turf is obvious. It's everywhere — home lawns, parks, roadsides, building grounds and more. People forget the main purposes of turf are to hold soil in place and offer solid footing. The beauty of turf overpowers its function.

FUNCTIONAL BENEFITS

In addition to stabilizing the soil, lawns offer many other benefits as well. Each makes life more enjoyable.

Turf moderates the climate. It cools city streets and reduces energy costs of cooling homes and businesses. Concrete and other hard building materials often cause urban areas to be 10 degrees warmer than nearby rural areas. According to The Lawn Institute, eight average-sized lawns have the cooling effect of 70 tons of air conditioning; the average home-size air conditioner has just a 3- to 4-ton capacity.

DID YOU KNOW?

The role of turf often is overlooked by the public. Healthy turf provides a number of benefits, and specialty pesticides play a key role in keeping turf in top condition. Well-groomed turf:

- Promotes safety and health. Turf reduces fire hazard, reduces injury to children or athletes and provides a safety buffer for roadsides, airport runways and agricultural fields.
- Improves the environment. Turf tempers the climate around homes, as well as stabilizes the soil and prevents runoff.
- Beautifies and improves the value of property. Turf is critical in landscape design. Its green color accents and frames plantings of ornamentals. Well-maintained landscaping typically adds up to 15 percent to a home's value.
- Provides recreational opportunities. Turf provides the safest, least expensive and most resilient outdoor surface for sports. No other surface of vegetation tolerates as much abuse.



Turf also reduces noise levels by as much as 30 percent, and cuts glare along roadsides, which poses a hazard to drivers and an annoyance to those in homes and offices. Turf's rough surface breaks up incoming sunlight.

As with ornamentals, healthy turf provides a zone of protection that slows the spread of wildfires around buildings. Northern California residents learned this lesson in 1991. Because of their healthy lawns, many homes survived the Oakland fires.

In addition to helping save lives, a thick lawn improves quality of life. A healthy lawn averages six turfgrass plants per square inch and 850 plants per square foot. There are 8 million plants in an average 10,000 square foot yard. Each plant converts carbon dioxide from the air into the oxygen we breathe. A turf area 50 feet by 50 feet releases enough oxygen to meet the needs of a family of four. Turfgrass also absorbs smog-produced ozone and sulfur dioxide.

When it intercepts rain, turf prevents hardening of the soil. If turfgrass leaves didn't take the brunt of the downward force, driving rain would wash away soil and leave the top layer hardened. Turf's root system helps the soil breathe and allows water to enter the soil.

Golf greens wouldn't be "green" if not for natural turf. A diligent weed control, aeration and fertilization program keeps turf healthy, dense and attractive.

Similarly, turf reduces runoff of water and nutrients. In fact, agricultural extension agents recommend grass buffer strips around crop land and feedlots to reduce runoff and keep nutrients from entering waterways.

Because of its ability to remove nutrients from water, turf is used as a living filter to clean up sewage waste. Waste water is applied to turf and soil to be purified before entering ground-water systems.

On another safety front, turf is required along airport runways to prevent dust from flying into aircraft engines. Along highway roadsides, turf serves the same purpose. Turf also serves as a safety strip in case a plane strays from the runway or a car runs off the highway.

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Natural turf is preferred for athletic fields. Turf takes abuse and bounces back, providing sports enthusiasts with solid footing and cushioning.

HUMAN HEALTH AND SAFETY

Family health and safety is a prime concern. Surprisingly, many dangers exist around the home. Despite its appearance as a beautiful, lush carpet of green, a lawn plays a vital role in minimizing dangers. Many Americans seem to have forgotten turf's role in maintaining the health and safety of families and pets.

Turf that is free of weeds and mowed regularly provides a safe haven for allergy sufferers. Pollen from noxious weeds, such as ragweed, greatly bothers hay fever sufferers. The National Institute of Allergy and Infectious Disease reports 35 million Americans suffer from allergies, and 9 million of those have asthma. Although allergic reactions rarely are fatal, asthma causes about 5,000 deaths per year. By stopping seedhead formation with specialty pesticides and regular mowing, the source of pollen problems is eliminated.

Healthy turf also reduces allergic reactions caused by dust and other particles in the air. It's estimated turfgrasses trap much of the 12 million tons of dust and dirt released each year into the atmosphere.

Similarly, weeds such as clover and dandelion attract insects that can be fatal to humans who experience reactions. Various insects, including bees, wasps, hornets, yellow jackets, fire ants and Africanized killer bees, are responsible for about 40 deaths a year. Severe reactions to stings occur in 0.4 percent of those stung. Controlling insects and insect-attracting weeds with specialty pesticides helps prevent unnecessary deaths.

In daily life, turf provides a clean cushion on which children can walk and play. Turf cushions toddlers' falls. Children stay cleaner in grass, too.

Turf provides solid footing and cushion on sports fields. A study by the Sports Research Institute, the National Athletic Injury/Illness Reporting Service and The Pennsylvania State University found that one in five injuries and about 44 percent of ankle, foot and knee injuries are field-related. Fields in better playing condition are safer. The study also found that although practice fields were used much more than game fields, they received less care.

This safety message has not been highly publicized. A timely weed control, aeration and fertilization program promotes dense, healthy turf, which, in turn, promotes field safety.

RECREATIONAL BENEFITS

Where would sports be without turf? No other plant takes such abuse and still provides solid footing and cushioning. While artificial turf is used on some athletic fields, players generally say it's too hot and it leads to injuries. Managers of athletic fields dislike its maintenance headaches and hefty costs compared with natural turf.

Natural turf usually is used on sports fields because:

- It provides the safest, strongest and least expensive surface for sports.
- It is resilient. Turf absorbs shock without altering the playing surface. Turfgrass leaves and shoots, thatch and soil allow the surface to bounce back.
- It recuperates quickly from injury when cared for properly.
- It provides a natural surface for walking, running and sports.

A variety of sports are played on turf: baseball, cricket, croquet, field hockey, football, golf, lacrosse, lawn bowling, polo, rugby, soccer, softball, and tennis.

EYE APPEAL

How can one judge the beauty turf adds to a landscape? One good way is to walk down a street and compare the eye appeal of nicely manicured lawns to lawns that are unkempt, thin and full of weeds. Note the connection between turf quality and your general impression of the property.

The public recognizes turf's value in home sales. A Gallup Survey found 62 percent of all U.S. homeowners believe investing in lawns and landscaping is as good or better an investment as other home improvements. Proper and well-maintained landscaping can add up to 15 percent to a home's value, according to the survey.

From a design standpoint, turf is a critical part of the landscape. It breaks up plantings. Its green color accents and offers a frame for plantings. Turf is an alternative to concrete and asphalt in urban areas.

THE NEED FOR SPECIALTY PESTICIDES

Proper care is the key that unlocks the benefits of turf. A healthy lawn provides all the benefits already discussed, but a poorly maintained lawn falls short.

Keeping a lawn in top shape requires a combination of pest control and cultural practices, such as mowing, aeration, irrigation and fertilization. All aspects affect lawn quality. If improperly fertilized, irrigated or aerated, turf will be stressed and soon will give way to weed, disease and insect problems.

Timely identification of the cause of problems and beginning treatment, such as correcting fertility, pH or compaction, are key. Next, control measures should be combined with cultural practices and a preventive pest control program.

The best guarantee for a successful lawn is use of specialty pesticides when needed. Without proper controls, you'll miss out on the health and safety benefits turf has to offer.



Managers of athletic fields say natural turf is easier and less costly to maintain than artificial turf.