standards of care for sports fields that contribute to these inconsistencies. We need to reach common denominators when it comes to hiring practices. Employers need to demand prerequisites like schooling and minimum years of experience. We also need to set standards for wages and minimum standards for sports field maintenance. By doing this, we create consistency throughout the industry and therefore our credibility increases. Our voices are weak right now because of these inconsistencies. This proves difficult when trying to fight such things as pesticide bans.

What do you consider to be the biggest benefit of being a member of the Sports Turf Association?

Being a member of this association provides me with the tools needed to succeed in this industry. The association offers seminars and field days geared to our special needs. It also affords me the opportunity to keep up on the educational aspect of our industry. I benefit from the business contacts and can meet and discuss topics with fellow members.

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**How Do You Learn?**

A LEARNER TENDS TO REMEMBER:

20% of what the learner hears; your verbal instructions to them.

30% of what the learner sees; while they watch the job being demonstrated.

50% of what the learner sees and hears; while you explain the job and demonstrate it at the same time.

70% of what the learner says while talking; they are repeating the steps to you.

90% of what the learner says while doing something; they are verbalizing about the job while actually showing you the various steps.

— Farmsafe, Farm Safety Association, Volume 29(2), Spring 2004

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**Environmental Benefits of Turfgrass**

**DR. JAMES B. BEARD, PROFESSOR EMERITUS, TEXAS A&M UNIV.**

As well as being attractive, turfgrasses have numerous important functional purposes. These important dimensions that contribute to our quality of life are too often overlooked.

**Functional Benefits**

- Soil erosion control – the best and most cost-effective means for protecting a vital resource.
- Dust stabilization – the best and most cost-effective approach.
- Reduces precipitation run-off (flood control) due to a dense canopy biomass.
- Increases ground water recharge by water entrapment in dense canopy.
- Active entrapment and biodegradation of organic chemicals via a large, diverse microbial population.
- Atmospheric pollution control, both particulate and chemical, by canopy entrapment.
- Carbon sequestration (soil organic carbon accumulation) in grass-based soils from extensive root decomposition.
- Reduces noxious and nuisance pests – mosquitoes, chiggers, rodents and snakes – Lyme disease, West Nile virus, etc.
- Enhances property security by providing open visual site lines.
- Lowers fire hazard spread via green fire-breaks in urban areas.
- Safety in vehicle operation/equipment longevity on roadside and air fields
- Urban heat dissipation via evapotranspiration.
- Noise abatement – a 40% reduction in 70 ft. of roadside turf.
- Lower water use rate than trees due to lower leaf area per unit land area.

**Recreation and Aesthetic Benefits**

- Enhances physical health of participants including cardiovascular functions.
- Serves as a safety cushion against impact injury – best in cost-effectiveness.
- Provides a low-cost surface for outdoor sport and leisure activities.
- Even home lawn care offers physical exercise, especially for senior citizens.
- Improves mental health, especially in urban areas.
- Contributes to social harmony among people.
- Contributes positively to attitudinal work productivity.
- Has therapeutic value to individuals recovering from serious illness.

Among may other benefits, turfgrasses control erosion, increase ground water recharge and enhance property security.

**Summary**

Properly maintained lawn and recreational turfs:

1) Contribute a diverse array of benefits that make turfgrasses one of the best friends of the urban environmentalists.

2) Greatly enhance our quality of life, especially in densely populated urban areas.

**Acknowledgement**

This article summarizes a detailed research review paper published in the Journal of Environmental Quality by J. B. Beard and R.L. Green. Copyright 2004 by James B. Beard. For a complete copy of the research review paper, contact info@TurfGrassSod.org.

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