Defending the Profession

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Emotion wins arguments. Emotional speech trumps scientific speech. These statements are true for nearly every topic, especially in today's polarized, 24/7 news cycle society. It is also true that golf course superintendents are educated and humble environmentalists. While our profession entails actively manipulating an outdoor environment, the vast majority of superintendents embrace nature and constantly work to lessen the chance of any negative effects of turf culture.

Golf turf in American has come under attack on local and national levels, branded a wasteful and polluting practice that requires extensive inputs. While it is true that turf culture requires inputs, the amount and frequency of these inputs are decreasing through research, modern technology, and innovation. We are aware of our "green" efforts, but is the public? Conveying this message to a neighbor or a reporter is not an easy task due to our "1+1 = 2" scientific defense approach. I would like to present some ideas and references that will help us bring an emotional element into our message when defending turf and our profession, thus better conveying and relating our position and actions.

I believe it is important to first establish your own credibility. This may be uncomfortable but it will many times quickly show that you are much more qualified than your opponent. Whether speaking to an individual or a group, do not hold back. Unlike the well-known requirements to be a teacher or a surgeon, the general population has little information on our levels of experience and education, especially our continuing education efforts (i.e. the Certification process or Pesticide Applicator Training).

Golf course superintendents have a higher average education level than the general public (WI Ag. Statistics Service, 2001). No element of experience is insignificant. Think back to how your career actually began to possibly find an emotional element that will connect you with the audience. For example, my own background yields this statement: "My experience in turf began in home lawn care, where for 7 seasons I averaged 7 lawns per week. Therefore, by my early 20s, I had seen 60% more turf than a 50 year old individual." Your past, present, and future experiences will lend credibility to your argument or position.

It is also important to establish what I call "anti-credibility." Listing off all of your golf course and green industry jobs will probably make you sound like a paid lobbyist for the turf industry. Don't worry; you have plenty of experiences to balance out the scale. Turf is the ultimate "green" green plant. Growing healthy turf in a responsible manner provides many benefits to the environment and to the human population. Many of us are active conservationists, whether we document it or not. During my previous assistant superintendent years, I monitored the Audubon Cooperative Sanctuary program at two golf courses. Dust off Audubon's information packet. It is full of conservation examples that you can pass on to the public. If your course is not a member yet, consider joining the program because it contains numerous opportunities for positive public outreach and education.

Let's now outline some scientific studies to which we can attach emotional arguments to defend turf and the modern greenspace. Turf is branded wasteful by some because the inputs are visible but, unlike other agricultural systems, the outputs, or benefits, are not readily quantified. The end result is that the uninformed public views turf as a resource "black hole." With these resources, we can argue that the benefits far outweigh the inputs.

Emissions from Turf Equipment. Volckens et al. (2008) quantified the emissions of 2-stroke engines and found that approximately 11% and 5% of total hydrocarbon (HC) and carbon monoxide (CO) emissions, respectively, in the US came from small engine use. They also found that EPA regulation implemented in 1997 has since reduced HC and CO emissions by 78 and 50%, respectively. Gabele (1997) examined 4-stroke engines of various ages and technologies and found that the newer engines had lower HC and CO emissions due to new engine technology and the use of ethanol fuels. We should take a play out of the auto industry's book and champion our equipment manufacturer's efforts to reduce our fuel use and emissions. Think of the reaction if you told someone your string trimmer has 78% less emissions today than it did in 1997. Small fact, big effect.

Turf Water Use. Water usage is the most visible turf input and usually gets the most attention. It is important to convey that misuse of water for turf is not a function of the turf but a function of human error. Rosillion (1985) quantified the daily average per person water use in the US and compared that to how much water turf needs. Our daily average was 1800 to 1900 gallons per day, only 10% of which was direct, household use. If you take the daily average use and spread that day out across a year, it would be 1" over a 10,000 ft2 lawn every day. The average northern climate lawn of 5000 ft2 needs only 1" per week for only 3 to 4 months a year. Compare 1" per day versus 1" per week and we see turf doesn't need much water to survive.

Runoff and Nutrient Loss. A healthy turf system has excellent resistance to lateral water movement due to 8-30 billion shoots per acre (Beard and Green, 1994). Runoff from turf only occurs at the worst storm events while runoff from bare soil or hardscapes would have occurred much earlier. When looking at runoff from urban and agricultural areas, agricultural runoff affects much higher percentages of our lakes and rivers than urban runoff (USDA, 1989). And soil erosion from turf and agriculture is 196 and 8056 lbs per acre, respectively (Gross et al., 1991). Very, very different numbers

It is true that fertilization of any system releases N2O gas but Horgan et al. (2002) found that fertilizing creeping bentgrass or Kentucky bluegrass with acidic rather than basic fertilizers reduced the release of N2O into the atmosphere. Peer-reviewed research shows that turf contributes very little to the nutrient/runoff problem and newer research is guiding superintendents on methods to reduce our impact. An example would be golf courses spoon-feeding with water-soluble N or using slow release N. This is what the public needs to know; we are a proactive industry.

We in the turf industy have to spread the word that the benefits of turf outweigh the inputs provided to maintain the turf.

Benefits of Turf to Society. Turf and the modern greenspace provide numerous, often overlooked, benefits to society, especially in an urban environment: soil erosion control, dust prevention, heat dissipation, noise and glare reduction, air pollution control, low-cost playing surface, improved physical and mental health, increased property value, and improved quality of life. All of these benefits, and more, are described in a comprehensive literature review titled "The Role of Turfgrasses in Environmental Protection and Their Benefits to Humans," written by James Beard and Robert Green (1994). Every person involved in the green industry should be familiar with this publication and should even have a copy available at all times. It is an excellent talking-points resource when speaking with any individual or group about our profession. WGCSA or GCSAA members may be able to get a copy online through the Turfgrass Information File (TGIF) and it is easily found by searching the article title in most internet search engines.

Beard and Green (1994) outline the importance of the playing and spectating of turfed sports. For the participants, turf helps improve physical well-being; for the spectators, improved mental well-being through stress relief and diversion from the fast paced life. The economic impact of turf recreation in Wisconsin is where you can really attach an emotional element to your argument: Use Lambeau Field and Miller Park as examples. Every seat is full for nearly every game, win or lose, plus the hundreds of other functions at those facilities. Millions of dollars are spent every year either playing or watching sports. And let's not forget Whistling Straits. Would the economy of Kohler and Sheboygan, WI, be the same without golf? The answer is a definite "no." Take away turfed sports and Wisconsin's economy would lose millions in spending money and tax revenue. Golf courses throughout Wisconsin pay $32 million in taxes annually (WI Ag. Statistics Service, 2001).

You are surrounded by people who utilize turf in their daily lives, yet they fail to recognize its benefits. Even in winter turf is acting as a living snowmelt filter. It is our calling to present the benefits of turf to society. I hope I have given you some ideas and resources to help convey the message when the time comes. And it will come.

References

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