

Science of the Green Initiative

Brian Horgan, Ph. D. Professor, University of Minnesota
Parker Anderson, Researcher, University of Minnesota

Summary:

Golf courses are currently perceived by the majority of the public as a resource-intensive land use that provides minimal benefit to the surrounding community. Those within the industry know that many of these allegations of waste are not valid. However, some are justified. The golf industry has historically fought regulation and scrutiny, believing that increased regulation on a facility will increase operation costs. In order to shift the perception of the public and halt the downward trajectory on which the golf industry currently finds itself, innovative approaches to golf course management and operation need to be adopted.

An industry insider has stated that the “political reality is that for the 90 to 95 percent of the public who are not golfers, the use of pesticides and fertilizers on a golf course carries absolutely no benefit, so why should they be willing to tolerate any risk, actual or perceived?”¹ and “as long as potentially lethal chemicals are used on golf courses, no amount of research will eliminate the potential risk to the satisfaction of the non-golfer.”²

By highlighting the value added to communities, golf courses can demonstrate to golfers, and more importantly to non-golfers, that their local facility is a benefit to their area and a welcome partner in the betterment of their community. Renowned golf course architect Dr. Alister Mackenzie stated, “The chief object of every golf architect and green-keeper worth his salt is to imitate the beauties of nature so closely as to make his work indistinguishable from nature itself.”³ Carefully considering the ecosystems of the facility in developing a management plan for the golf course is critical in demonstrating the value of golf courses to the skeptical non-golfers of the community.

The Science of the Green Initiative is developing a partnership with the University of Minnesota Institute on the Environment Natural Capital Project (NatCap). NatCap aims to integrate the values of nature into decisions affecting the environment and human well-being.⁴ This partnership focuses attention on the values and services that a golf course provides to the local ecosystem, the local community, as well as a broader scale of stakeholders. For example, in many urban areas undergoing increased development of impermeable surfaces, golf courses are often refuges of green space in these built environments that provide the area with valuable water filtration and stormwater management, habitat for various species, and any other ecological functions for the community. Appraising these values of a golf facility demonstrate the importance of golf in society today.

¹ Doak, T. (1992). *The Anatomy of a Golf Course* (pp 210). Short Hills, NJ: Burford Books.

² Doak, T. (1992). *The Anatomy of a Golf Course* (pp 210). Short Hills, NJ: Burford Books.

³ Mackenzie, A. (1997). *Golf course architecture*. New York: Classics of Golf.

⁴ University of Minnesota Institute on the Environment. (2016). *Natural Capital Project*. Retrieved from <http://environment.umn.edu/discovery/natcap/>