



Establishing buffers of long grass and native vegetation around bodies of water is an effective way to help protect water quality and create valuable habitat.

CLEAN WATER AND HEALTHY TURF

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When a golfer encounters a body of water on a golf course, their primary goal is preventing their ball from ending up in it. When a golf course superintendent looks at the same body of water, they have a much different outlook. One of their most important goals is making sure water quality is protected. Superintendents want to promote a healthy environment for the various plants and animals that depend on the golf course as a habitat and they also want to ensure that people in the surrounding community and beyond have clean water.

One of the best ways a golf course superintendent can accomplish the goal of preserving water quality is by maintaining a healthy, dense stand of turf. Numerous research studies have demonstrated that turf does an excellent job of capturing soil particles, nutrients and other debris during a rain event. The turfgrass leaves and fibrous mat layer essentially act as a filter, reducing runoff and trapping potential pollutants.

Yet some individuals may associate healthy turf with an abundance of nutrients and therefore a potential risk to water quality in comparison to other types of groundcover. Such an assumption that properly

fertilized turfgrass is fundamentally harmful to water quality or inferior to other landscapes is not accurate. Researchers at the University of Wisconsin found a different outcome when they compared turfgrass to native prairie vegetation, a popular turfgrass alternative on golf courses. Data from their two-year field study suggest that fine fescue and native prairie vegetation have similar runoff and leachate results. Both were effective at limiting nitrogen and phosphorous movement. The values they detected for the fine fescue treatments were consistent with previous research on Kentucky bluegrass. Not only does turf deliver adequate protection of water quality, it is much easier to establish and certainly a friendlier playing surface for golfers.

When best management practices are followed, golfers can rest assured that the amount of nutrients present in golf course runoff is minimal and not enough to cause environmental concerns. University of Maryland scientists found negligible concentrations of nitrogen, phosphorus and various pesticides downstream from golf courses and concluded that contamination did not reduce macroinvertebrate communities downstream in the watershed. Applying fertilizer in appropriate amounts, judicious use of plant protectants, timing applications carefully, avoiding overwatering, and maintaining buffers of longer grass and native vegetation around bodies of water are just a few of the simple but effective ways that golf course superintendents minimize the risk of water quality impacts. In the end, golfers and superintendents are both working toward a similar goal – keeping things out of the water.