

Cattail Chronicles

Minnesota's No Phosphorus Law is a Model for Lake County

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Fertilizer containing phosphorus (P) is needed for a green lawn, right? In most cases this isn't true since a typical lawn already has adequate amounts of P. Soil tests can be done to determine whether your lawn needs additional P, but new lawns are typically the only lawns in this area that need it. When you purchase a bag of fertilizer, there are three numbers listed. The middle number represents P and should be listed as zero.

A study conducted in 2005 in the Minneapolis/St. Paul (Twin Cities) area of Minnesota found that 75% of lawns tested had high levels of P and that the addition of P did not improve turf growth. Additionally, when P was added to lawns with high P levels, P concentrations in runoff water increased significantly. This high P runoff can contribute to algal blooms in lakes.

Minnesota enacted a statewide Phosphorus Lawn Fertilizer Law (PLFL) in 2002. This law initially restricted P fertilizer in the seven county metropolitan area of the Twin Cities. The law was expanded in 2004 to restrict the use of P fertilizer statewide, active January 1, 2005. A study was recently conducted to see if this legislation has been successful, and only two years after the statewide implementation, the answer is yes. The study reports that P free fertilizer is readily available to consumers (found in 97% of stores). Also, 82% of lawn fertilizer purchased in 2006 was P free, decreasing tons of P in lawn fertilizers by 48% between 2003 and 2006. Another finding was that P free fertilizer did not cost the consumer a noticeable amount more than fertilizer containing P, and

customers at stores supplying no P fertilizer were reported to be very supportive of the law.

Water quality was also monitored by testing runoff from watersheds in different municipalities. Watersheds in the city of Plymouth, a municipality that had restricted the use a P fertilizer since 1999, had less P in runoff from pervious areas (e.g. lawns) than Maple Grove, a municipality that became included in the PLFL in 2004. In fact, there was a 12-16% reduction in P from runoff in the Plymouth watersheds. These results can be explained by the fact that Plymouth soil had more time to flush out the built-up P than Maple Grove. This reduction in P adds up financially, since typical storm water best management practice (BMP) construction costs approximately \$500/lb of P removed, and the implementation of the PLFL in Minnesota has had minor costs for communities. Results from this study in Minnesota prove that legislative restriction of P lawn fertilizers can have big effects for minimal costs.

Local Lake County municipalities are starting to take notice of the benefits of instituting a no P fertilizer ordinance. The Village of Antioch recently enacted a ban on the use of P fertilizers within village limits that will require village stores that carry fertilizer to post signs about the ban and provide a no P fertilizer alternative. Village officials are encouraging others in the county to follow in their footsteps. Other villages are starting to look into similar ordinances. The Lake County Health Department-Lakes Management Unit strongly encourages such ordinances and hopes that it becomes a popular trend in Lake County.

The Lakes Management Unit compiled a listing of local businesses that carry no-phosphorus fertilizers. View this list on our website: (www.co.lake.il.us/health/lakes.asp)



Illinois Lakes Management Association

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