## Lake District works with local businesses to promote p-free lawn fertilizer

By Greg Farnham and Ruth Johnson, Lake Sinissippi Improvement District Commissioners

In summer 2007, the Lake Sinnissippi Lake District contacted local hardware stores and found that only one of the four stocked phosphorus-free lawn fertilizer and weed 'n feed. We discussed with the store managers the possibility of stocking phosphorus-free fertilizer products as part of a spring 2008 sales promotion by the Lake District. Each store manager agreed to participate in the promotion.

The summer 2007 newsletter for the Lake District included an article on the phosphorus problem, the importance of using non-phosphorus fertilizer for normal lawn care, and the sales promotion project planned for 2008. The article reminded property owners who use a commercial applicator for lawn care that they can request that phosphorus-free fertilizer be applied. We also encouraged persons with questions about the need for additional phosphorus to have a soil test done and referenced the UW-Extension Office in Juneau.

In December 2007, we issued a news article to the three newspapers serving the lake community and watershed: the Dodge County Independent News, Horicon Reporter and Mayville News. The article was entitled *Phosphorus-free lawn fertilizer to help river and lake*, and included a chart depicting a total phosphorus water quality index (see article below). The article indicated that phosphorus-free lawn fertilizers have Nitrogen (N), Phosphorus (P), Potassium (K) nutrient numbers with a zero in the middle, such as 22-0-15, and identified the four participating hardware stores. Lastly, the article said that the Lake District planned to collaborate with the stores and promote the sale and use of phosphorus-free lawn fertilizer within the Rock River-Lake Sinissippi community during the 2008 growing season.

We worked with the media department of one of the newspapers and developed an attractive and eye-catching advertisement for the promotion program (see right). Each advertisement included a discount coupon good for \$2.00 off the purchase price of a bag of phosphorus-free lawn fertilizer or phosphorusfree weed 'n feed at the participating hardware stores.

In March 2008, halfpage black and white advertisements were run in the three community and watershed newspapers. At the same time an information letter and coupon were mailed to Lake District property owners, and instore promotion displays were prepared for each of the hardware stores. A follow-up media run was made in early May with quarter-page two-



color advertisements in the three newspapers.

More than fifty households participated in the sales promotion, purchasing bags of phosphorus-free lawn care products with the redeemable coupons.

The Lake District is pleased with the results of our initial efforts. We included an article in our summer 2008 newsletter about the program and featured a photograph of the store manager who sold the most bags of fertilizer with the coupons. We had soil test kits available at our annual meeting in August for those in attendance. Although we plan to repeat the promotional effort in 2009, it is clear that the only truly effective, meaningful step for long-term water quality improvement is a statewide restriction on phosphorus-containing lawn fertilizer. The Lake District is supportive of efforts by Wisconsin Association of Lakes and other organizations to persuade the Wisconsin Legislature to complete this important work.

## Effects of phosphorus on Lake Sinnissippi

Both the Rock River andquLake Sinissippi in DodgelakeCounty appear on the federalphEPA 303(d) list of impairedexwaters due to nutrientliteenrichment from high levelsindof phosphorus. Findingquways to effectively deal withthethis pollutant presents LaketwSinissippi Improvement Districtugwith a considerable challenge.du

quality parameters in the lake and tributaries. Total phosphorus concentrations in excess of 150 micrograms per liter (ug/L or ppb) generally indicate very poor water quality. Phosphorus values in the river and lake are usually twice that amount, over 300 regulations that restrict the sale and use of phosphoruscontaining lawn fertilizer for residential and commercial applications.

In 2007, the Lake District decided to initiate action on the local level to target the lawn fertilizer issue. We reviewed studies of soil nutrient composition within our watershed and found, not surprisingly, that most soils have very high concentrations of phosphorus—so high, in fact, that no additional phosphorus is needed for normal lawn care. We also read, with interest, about outreach work conducted by Lake Ripley Management District and the Rock River Coalition to heighten public awareness of the phosphorus problem, and to encourage use of phosphorus-free lawn fertilizer.

	TOTAL PHOSPHORUS WATER QUALITY INDEX
	300 Rock River and Lake Sinissippi
Very Poor	
	200
Poor	

The total watershed of the lake is more than 500 square miles, a challenging factor when trying to moderate the effects of eutrophication and improve lake water quality. Upstream from Lake Sinissippi, the Rock River watershed includes the Horicon Marsh as well as thousands of acres of agricultural land and urban areas of Waupun, Mayville and Horicon.

In 2002, Lake Sinissippi Improvement District began monitoring levels of phosphorus and other water

strict ug/L!

These high phosphorus levels are a contributing factor in production of large amounts of algae in the lake during summer months, which can adversely affect water recreational activities. When the algae die and are decomposed by bacteria, oxygen in the water is depleted. Dissolved oxygen concentrations in the lake can drop to levels that are conducive to a fishery dominated by rough fish.

The Lake District has been working with county and state officials to establish



Total phosphorus levels in Lake Sinnissipi are 300 ug/L, twice the amount of phosphorus that generally indicates very poor water quality.

Although Wisconsin is considering a state-wide restriction on phosphorus lawn fertilizer, as modeled on the current laws in Dane County and Minnesota, legislative action in Madison is unfortunately stalled.

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