

Detroit River International Wildlife Refuge IVM and Ecosystem Management

IVM Partners coordinated vegetation management operations to remove the invasive reed grass *Phragmites australis* from over 900 acres of industrial and public lands in the Delaware Estuary in 2004, under a grant from the National Fish & Wildlife Foundation. The success of this work was publicized by the U.S. Fish & Wildlife Service which resulted in a call from the Detroit River International Wildlife Refuge asking IVM Partners for similar assistance to restore native wildlife habitat at Humbug Marsh near Trenton, MI.

Rick Johnstone, President of IVM Partners, reviewed the habitat restoration needs of the refuge with Refuge Manager John Hartig and agreed to write the Michigan Department of Natural Resources to support the refuge grant proposal "Detroit River Coastal Wetland Restoration and Enhancement" by helping to coordinate \$75,000 of matching funds for the grant, and expertise to restore the refuge ecosystem.

IVM Partners then wrote the "Integrated Vegetation Management Plan Humbug Marsh of Detroit River International Wildlife Refuge" and proceeded to implement the plan in conjunction with consulting work for ITC Holdings. Johnstone secured a \$10,000 cash donation from ITC Holdings and over \$70,000 of in-kind service support by using their contract vegetation management crews, which he trained. Contractors were used to clear trees for an access road and scenic overlook and to mow or herbicide treat vegetation according to the plan. The vegetation contractors donated \$14,000 of their crew time as an in-kind service instead of invoicing ITC.

IVM Partners employed a botanist from Chesapeake Wildlife Heritage to document plant community changes for the refuge. Documentation studies have been established to show the transition of vegetation before and after eradication of invasive buckthorn shrubs on the forest floor, and phragmites from the wetland areas. Fencing has also been erected in a study area to assess the best practices for restoring lake plain prairie and the impact of white tail deer browse on vegetation recovery.

Work continues at Humbug Marsh and vegetation management is planned for additional acreage of the expanding refuge along Lake Erie. Johnstone provides IVM training at numerous conferences across the country, where he references the work at Humbug Marsh and stresses the importance of integrated techniques to control invasive weeds on the refuge system. He also advocates similar vegetation management to control invasive weeds and restore wildlife and pollinator habitat on utility and highway ROW, which can be viewed as extensions of a refuge as they radiate out into private lands like the spokes of a wheel.

Rick Johnstone
IVM Partners President