



TAKE A WALK IN THE WOO









Carpenter Lake Nature Preserve Grand Opening October 7

Preserve offers scenic sanctuary right in Southfield

The City of Southfield is known for its abundant natural beauty, well maintained homes and neighborhoods, and as an ideal place to live and work. Southfield offers a complete living community, with nearly 800 acres of park land, two public golf courses, miles of nature and fitness trails, and numerous other recreational activities for the entire family. Residents can enjoy Southfield's beautiful parks throughout the entire year, whether heading out for a picnic in the summer or taking a leisurely walk along one of the many nature trails to enjoy the fall colors. Southfield also offers numerous playlots and playscapes in addition to many other amenities including a fitness center, several ballfields, tennis and basketball courts, an Olympic swimming pool and sports arena, and sand volleyball courts.

The City continues in its 50 year tradition of providing residents with unparalleled city services, programs and facilities with the newest addition to Southfield's many recreational opportunities - the Carpenter Lake Nature Preserve. As a proud Tree City USA Award recipient for the past 23 consecutive years, Southfield has long been committed to protecting our environment, woodlands and wetlands with over 380 acres of natural areas set aside for preservation. After more than five years of planning, development and site improvement, the official grand opening of the Carpenter Lake Nature Preserve will take place on Thursday, October 7. With the opening, Southfield residents will have yet another beautiful natural area all their own to enjoy yearround.

Preserve at a Glance

- Located on 10 Mile Road just east of Inkster Road along the Ravines Branch of the Rouge River.
- In development since 2003, the preserve features 42-acres of mature Oak-Hickory woodlands, forested wetlands and native meadows overlooking the beautiful fiveacre Carpenter Lake.
- The preserve offers residents nearly one mile of nature trails, interpretive signs and trailheads, numerous benches and easilyaccessible fishing and viewing platforms.
- Future plans for Carpenter Lake Nature Preserve include the addition of a new nature interpretive center that will provide environmental education programs and displays.
- Grand opening on Thurssday, October 7 at 12 noon. Call the Southfield Parks and Recreation Department at (248) 796-4620 for more information.

Carpenter Lake Nature Preserve

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he Carpenter Lake Nature Preserve is located on 10 Mile Road just east of Inkster Road along the Ravines Branch of the Rouge River. The City of Southfield originally acquired the rear 30-acres of the preserve in 2003 through the Federal Land for Parks program administered by the National Park Service. Through the program, the City traded the five-acre Optimist Park on Eleven Mile Road, part of a former U.S. government missile base, in exchange for the Carpenter Lake property. Land use restrictions to protect the property as park land in perpetuity were transferred from Optimist Park to Carpenter Lake. The front 12-acres of the preserve off Ten Mile Road were acquired in 2004 to complete the land acquisition for the \$3.5 million Carpenter Lake Nature Preserve.

"The preserve will really offer something for everyone," said the City's Parks & Recreation Director Bill Waterhouse. "The preserve has been carefully planned and developed to allow visitors a truly interactive experience with nature that will build an increased awareness and appreciation for our environment. The preserve will be a great place to enjoy a beautiful day whether you're walking, fishing, viewing wildlife or just relaxing."

The preserve features 42-acres of mature Oak-Hickory woodlands, forested wetlands and native meadows overlooking the beautiful five-acre Carpenter Lake. The preserve offers residents nearly one mile of nature trails, interpretive signs and trailheads, numerous benches and easily-accessible fishing and viewing platforms. Future plans for Carpenter Lake Nature Preserve include the addition of a new nature interpretive center that will provide environmental education programs and displays. The preserve was funded with the support of a \$1,030,000 Rouge River National Wet Weather Demonstration Project grant from the Environmental Protection Agency (EPA) and by a \$500,000 Michigan Natural Resources Trust Fund grant from the Michigan Department of Natural Resources (DNR). An additional \$500,000 DNR grant was also awarded that will fund the upcoming construction of the nature center.

"I think people will be surprised at how beautiful the park is, how peaceful," commented the City's Landscape Architect and Park Planner Merrie Carlock. "All the trees create a dappled shade that is cooling even on very hot days."

The City's Parks & Recreation and Public Works



departments worked together in partnership with environmental consultants and contractors to develop the preserve. The City has made significant recreational site improvements, including reconstructing the existing dam and dredging the lake to restore it to its original size. Carpenter Lake was originally created in the 1940's by damming the Ravines Branch of the Rouge River; however, the old dam was washed out and failing. The first phase of the project, which was completed in 2006, included completely removing and replacing the original dam. The new dam was designed and constructed to modern storm water standards to detain storm water runoff in the lake. This phase also included the removal of more than 30,000 cubic yards of accumulated sediments from the lower portion of the lake. The restoration of the lake and the creation of an underwater fish habitat and shoreline wetlands for wildlife were completed in 2007. The five-acre lake was reshaped to more closely resemble the profile of a natural lake, including the creation of new lake edge shelves planted with native wetland plant species.

The restored lake has an average depth of eight feet and is 10 to 12 feet at its deepest points. Underwater fish habitat structures, deep water holes and sand spawning beds were constructed to improve the conditions for fish. More than 14,000 native game fish species were released into the lake in the fall of 2007, including various species of largemouth bass, channel catfish, bluegill, sunfish and minnows. Nuisance and exotic fish species were removed due to their tendency to overpopulate and negatively impact the game fish population. A fish stocking plan was developed to limit the re-establishment of nuisance and exotic fish and to



provide a unique recreational fishery in an urban setting. Planted fish sizes range from three to nine inches and must survive one to two full growing seasons to develop a population large enough to support recreational angling. The newly established fishery is projected to reach its population objectives in two to three years at which point residents will be able to enjoy fishing at the lake.

The preserve is home to an abundance of wildlife, including a large variety of birds such as great blue herons, owls, red tail hawks, ducks, geese, and cormorants as well as red fox, mink and deer. Once fully developed, the project will restore the lake to a sustainable fish and wildlife habitat with improved water quality and storm water management.

The park development phase of the project was initiated in 2007. This phase included the installation of nature trails, boardwalks, permanent interpretive signs, and viewing and fishing platforms. The meandering trails were carefully plann ed to showcase a variety of habitats and the most scenic views throughout the preserve. The compacted crushed limestone nature trails maintain moderate gradients for easier walking. A new entrance drive and parking lot were also constructed to provide convenient access for the general public at the north end of the park off 10 Mile Road. The use of porous paving and other storm water management features such as bioswales were incorporated to provide control of runoff. This area was planted with native grasses and meadow plants and will have very few mowed lawn areas. The parking lot will serve as a storm water detention basin underneath the parking lot surface, which was constructed of porous paving blocks. Water will run through the pavement into the rock filled detention basin below with any excess water flowing over the surface to the bioswale, a central depressed planted area that utilizes the excess rainwater. This method greatly reduces flooding and pollution of the Rouge River. The parking lot was also designed to accommodate school and group use.

A new nature interpretive center will be constructed beginning in 2010, adding another important educational component to the preserve. The Carpenter Lake Nature Interpretive Center will utilize "green," sustainable architectural design and feature hands-on displays to educate the public about local flora and fauna. The nature center will also provide other educational nature-based programs for the community, schools and other groups. The center will educate the public about environmentally-friendly lifestyle choices, from landscaping with native plants, to preventing

fertilizer run-off, to how their home is constructed. The building itself will also be designed to demonstrate "green" or sustainable architecture in ways that people can apply to their own living environments.

"The development of the preserve has provided both immediate and long-term results for wildlife habitat, aesthetics and lake ecology," commented Parks & Recreation Director Bill Waterhouse. "Habitat improvements will continue to allow a place for plants and wildlife to thrive. The project has improved the Rouge River Watershed by increasing recreational opportunities, addressing storm water management issues and improving fishery and wildlife habitats."

The Carpenter Lake Nature Preserve will not only enhance and encourage resident's understanding and awareness of local woodlands, wetlands and wildlife, but also of the overall environment as well. The preserve will provide a peaceful natural sanctuary for residents that will offer the education, resources and assistance necessary to improve ecological systems in Southfield and southeast Michigan. Visitors will be rewarded with an interactive experience with beautiful wooded trails, interpretive signage and fishing and viewing piers to enjoy the lake. Get the whole family out in the fresh air and exercising together with a trip to Southfield's newest recreational opportunity. The preserve is open year-round from dawn to dusk and there are no entrance fees.



