“In terms of Ecology, of using the land in a natural way, he was ahead of his time; Ultra ahead.”

Pete Dye, on Radrick benefactor Frederick C. Matthaei

CONTENTS

Introduction 1
Environmental Programs 2
Wildlife Inventory 3
Promoting Pollinator Habitat 3
Natural Features Map 4-5
Naturalized Areas & Shoreline 6
Golf Course Signage Descriptions 7
Water Quality and Conservation 8
Environmental Management 9
U of M Partners and Programs 10
University of Michigan Golf Course 11
Caretaker Program 12
Community Outreach 13

All photographs provided by Radrick and UMGC Team Members.
Environmental stewardship is a win-win practice for the golf industry and the environment. It helps the bottom line, reflects positively on the golf industry, and offers the public the chance to experience nature. At the University of Michigan’s Radrick Farms Golf Course, environmental stewardship has been rewarding on so many levels. At its most basic definition, environmental stewardship is the responsible management of our natural resources. For us, it is much more. It represents an ethical value that defines our operational culture.

From the inception of Radrick Farms, environmental considerations have been a priority. Frederick Matthaei, Sr., a loyal alumnus and former regent, donated the property to the University of Michigan in the 1960’s. However, Mr. Matthaei was already implementing environmental stewardship practices in the 1930’s when he purchased the property and converted it from a gravel mine into a farm. He practiced the innovative science of arboriculture while growing at least one of every tree indigenous to the state.

University of Michigan President Harlan Hatcher suggested building a faculty golf course with then little-known golf course architect Pete Dye. Agreeing with the architectural plan, Mr. Matthaei encouraged Pete and Alice Dye to use “land in a natural way”. Radrick Farms is now an 18-hole championship layout set on 275 acres of beautiful, rolling terrain.

The Radrick Farms Team continues to embrace Mr. Matthaei’s pioneering environmental stewardship vision. Environmental stewardship helps us accomplish our mission of creating exceptionally valuable golf experiences for the University of Michigan community.
Audubon Cooperative Sanctuary Program for Golf Courses
ACSP for golf courses is an award winning education and certification program that helps golf courses protect our environment and preserve the natural heritage of the game of golf. The ACSP for golf courses covers six key environmental areas that are relevant to golf course management. www.auduboninternational.org/acspgolf

Groundwater Guardian Green Site
The (GG) Green Site program was developed to recognize good stewards of groundwater by encouraging managers and superintendents of highly-managed green spaces to implement, measure, and document their groundwater-friendly practices. www.groundwater.org/action/community/green-sites.html

Michigan Turfgrass Environmental Stewardship Program
The MTESP is intended to organize efforts of the turfgrass industry, state agencies, Michigan State University (MSU), and environmental advocacy groups to advance the environmental stewardship of the turfgrass industry and to recognize environmental achievements. www.mtesp.org

Community Partners for Clean Streams
The (CPCS) is a voluntary, cooperative effort between the Washtenaw County Water Resources Commissioner's Office and Washtenaw County businesses, institutional landowners and multi-family residential complexes. The goal of the program is to help identify practical, cost effective ways to protect Washtenaw County waterways through pollution prevention. www.ewashtenaw.org/cpcs

Clean Corporate Citizen Program
Radrick Farms is the first golf course in Michigan to receive the Michigan Department of Environmental Quality’s Clean Corporate Citizen (C3) program designation. This honor is given to facilities that have demonstrated outstanding performance and commitment to environmental stewardship.
WILDLIFE INVENTORY

Mammals:
- Whitetail deer
- Coyote
- Raccoon
- Skunk
- Star-nosed Mole
- Woodchuck
- Muskrat
- Chipmunk
- Squirrel
- Field Mouse
- Possum
- Fox

Birds:
- Bald Eagle
- Ring-Necked Pheasant
- Wild Turkey
- Canada Goose
- Mallard Duck
- Turkey Vulture
- American Robin
- Red-Winged Blackbird
- Purple Martin
- Baltimore Oriole
- Cardinal
- Barn Swallow
- Hummingbird
- Blue Heron
- Red-Bellied Woodpecker
- Wood Duck
- Red tailed Hawk
- Blue Jay
- Bluebird
- Starling
- Great Horned Owl

Our customers have helped us identify these species on the property. Please, let the golf shop know whenever you see new wildlife. Be sure to check the boxes as you spot them on the course.

Promoting Pollinator Habitat

In 2012, the student organization “UM Bees” installed bee hives to promote pollinator habitat in and around the golf course and neighboring Matthaei Botanical Gardens.
NATURAL FEATURES MAP

Fleming Creek and Fry Pond are NO SPRAY ZONES

100% Natural Shoreline

Detail of Fleming Creek and Fry Pond

Radrick Farms Acreage:

Total Acreage: 275 Acres

Turf maintained for golf: 107.3 Acres

Gardens & Landscapes: 0.1 Acres

Fry Pond & Fleming Creek: 1.6 Acres

Mixed Forest: 100 Acres

Woodland: 20 Acres

Grassland: 32 Acres

Freshwater Wetland: 9 Acres

Impervious Surface: 5 Acres
Fleming Creek’s naturally buffered shoreline and j-hooks:

- Reduce soil erosion.
- Enhance habitat quality for fish & aquatic invertebrates.
- Improve water quality by filtering contaminants.
- Helps feed Fry Pond with fresh water which creates another habitat for a variety of wildlife.
- Provide aesthetic beauty that our customers appreciate.

Naturally buffered areas on the property:

- Provide wildlife food sources, corridors, and living space.
- Protect ecological communities.
- Promote and maintain diversity of wildlife.

These areas need continual maintenance due to invasive species such as:

- Canada Thistle
- Common Buckthorn
- Purple Loosestrife

Control methods include: burning, herbicide applications, mechanical, and hand removal.
Golf Course Signage

Caution Wildlife
The first sign on the property informs our customers and visitors that a variety of wildlife live on our property. Use caution while driving along our half-mile private drive and in our golf carts on the course. We never know what animal life may be present.

Eastern Massasauga Rattlesnake
Holes 15 through 17 are a great habitat for the Eastern Massasauga Rattlesnake, a threatened species that will defend itself. Please use extra caution in tall grass areas and along the shoreline of Fleming Creek.

Naturally Buffered Shoreline
Golfer awareness is important. We want our customers to appreciate our efforts to keep the waters of Radrick Farms clean and create natural habitat for wildlife. This signage increases knowledge of our environmental management practices.
**Water Quality & Conservation**

**Water Quality**

The quality of water used for golf course irrigation is an essential element of growing healthy turf. Fry Pond and Fleming Creek are used as the water source for the golf course’s irrigation system. These waters are tested three times a year for nitrates, pH, temperature and salinity.

**Water Conservation**

Evapotranspiration (ET) rates are used as a guide to determine the turf’s water needs. The ET rate is entered into a computerized irrigation system to calculate the amount of water to be applied to the course.

Moisture Meters are used throughout the day during the golf season to detect moisture levels in the soil. They help determine the precise amount of water needed for targeted, sight-specific applications.

These methods greatly increase the efficiency of water use and plant health.
Radrick utilizes an environmental management system (e-par) and Integrated Pest Management (IPM). We use best practices to optimize growing conditions while managing pests with the least possible impact on people, property, and the environment. These efforts meet the standards of ISO 14001.

We use suitable techniques and resources including computerized irrigation, topdressing, aerating, vertical mowing, precise pesticide application, brushing, rolling, scouting, and fertility testing.

Using an IPM approach is mutually beneficial to our customers, our operation, and the environment.

For more information on current Radrick maintenance Practices visit http://rfturf.blogspot.com/
Planet Blue
The University of Michigan’s Planet Blue initiative has established a campus-wide waste reduction goal for 2025:
According to the Department of Waste Management, we recycled 39.3% of our waste in 2013. We will continue to explore ways to help achieve the long-term University goals.

This initiative also established a program for individual University community members to become Planet Blue Ambassadors. During our on-boarding process for new employees, we encourage and offer them the opportunity to participate in the training found on-line:
http://sustainability.umich.edu/pba

Office of Campus Sustainability
Radrick earned Certification as a Platinum Sustainable Workplace from the Office of Campus Sustainability in 2012. The program encourages the efficient use of power, reduced use of office/kitchen supplies, and sustainability awareness. Our Team explores ways to improve all of our environmental practices. To learn more about certification, please visit:
http://www.ocs.umich.edu/SWPlatinum.html

In the summer of 2013, both University Golf Courses participated in EarthFest. This Campus Diag event offered us the opportunity to promote the golf courses’ positive impact on our environment and engage with students and others University units engaged in stewardship efforts. To participate in the community “party”, visit: http://www.ocs.umich.edu/earthfest.html

Michigan Athletics Sustainability Program
Whether hosting zero-waste events, increasing energy efficiency, conserving water, or educating our community - the Michigan Athletic Department is striving to be the Leaders and Best in environmental practices. Steered by a committee comprised of Team members, student-athletes and campus partners, the Athletic Department is committed to sustainability and living Planet Blue. For more information, visit:
http://www.mgoblue.com/sustainability/
Radrick Farms Golf Course isn’t the only golf course in Ann Arbor that incorporates Environmental Stewardship practices. In fact, it isn’t even the only University of Michigan Golf Course that cares for its natural resources. The University of Michigan Golf Course (UMGC) is also a leader in embracing these same values.

The acclaimed Alister MacKenzie designed UMGC has several examples of environmental activities:
- Added 20 acres of natural areas
- MTESP Certified in 2012
- Platinum Certified Workplace by the Office of Campus Sustainability
- 1st Place in Waste Reduction in the 2013 Recycling Champions competition for Planet Blue
- 50 percent of waste from football game day parking at the golf course was recycled in the 2012 season
- For more information on UMGC’s sustainable practices, visit: [http://mgolfcourses.umich.edu/?page_id=62](http://mgolfcourses.umich.edu/?page_id=62)

or call: 734 615-GOLF
Graduate Student Caretaker Program:

- In 2012, we began this unique program with three graduates students from the School of Natural Resources and Environment (U-M).
- The students live in a residence on the property and care for the course and natural areas.
- This interdisciplinary team of Masters students from the School of Natural Resources and Environment will be working with U-M Golf courses 2015-2016 to explore the potential for golf courses to enhance the practices being the providers of ecological, social, economic, and cultural benefits.
- Interested students can apply by contacting General Manager, Paul Scott: plscott@umich.edu
The Huron River Watershed Council regularly surveys Fleming Creek to
determine water quality and monitor fish
and aquatic invertebrate communities. Fleming Creek has a "good" condition rating
with clean, cool waters and healthy shoreline buffer zones.
Here is a link to the report:

The Dundee chapter of the Future Farmers of America brought
25 students to Radrick and mounted 30 bluebird nest boxes in
2012, and then 26 students installed bat houses in 2013. This
was partnership was in place prior to Radrick Farms becoming
a part of the University of Michigan’s Athletic Department. Now
that we are subject to NCAA rules, partnering with high school
groups is prohibited. However, we always striving to find
various ways in which we can engage our community at large.