

Chapter 2: Agricultural, Natural and Cultural Resources

Agriculture

Agriculture plays an integral part of Emmet County's rural landscape, rich cultural heritage and economy. Agricultural resources can be found throughout the county. The number of farms has increased slightly in the past fifteen years, while the average number of acres per farm decreased from 2002 to 2017 as shown in Figure 2-1. The break-up of farmland through land sales, development, reclassification of tax status and further division of large tracts of land may account for the decline in farm size. Interestingly, according to the USDA's Agricultural Census figures, the number of farms in Emmet County increased from 274 in 2002 to 324 in 2017, but the average size of farms decreased from 159 to 121 acres over this 15-year period. This may be due to niche farming, including crops of grapes, maple syrup and organic farming. This possibility can be substantiated using the 2012 and 2017 data for maple syrup, which shows a significant increase in number of farms (from 6 to 11), number of taps (732 to 5,610) and gallons of syrup produced (105 to 1,458). The total land in farms in Emmet County in 2017 was 39,256, a decrease of 549 acres from 2012 when the land in farms was estimated at 39,805 acres.

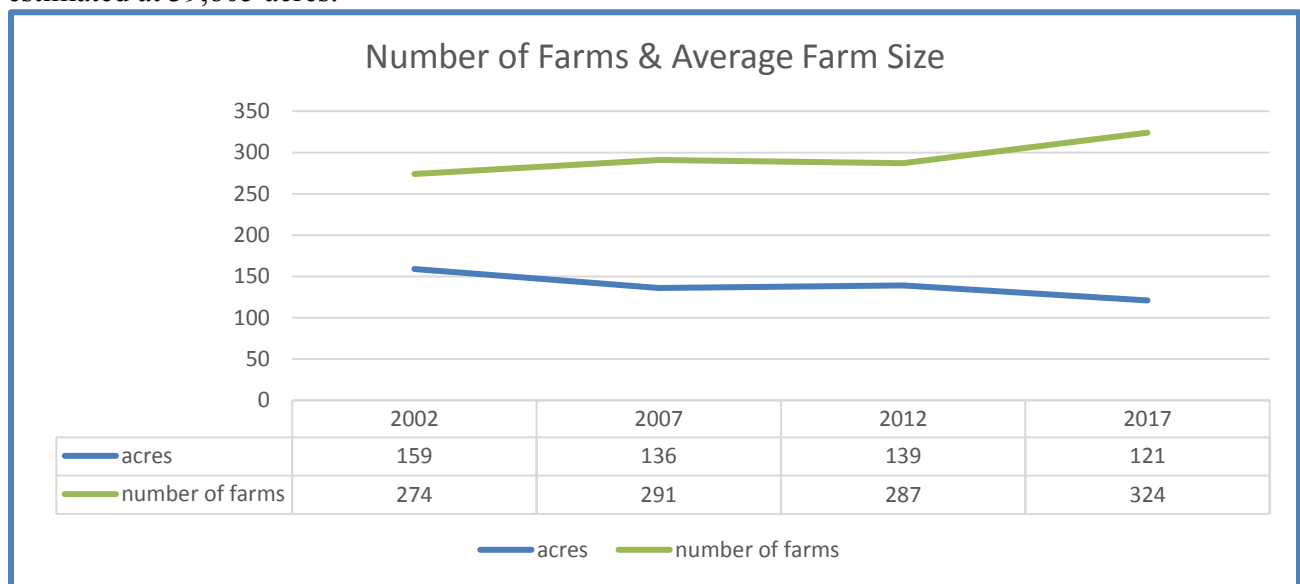


Figure 2-1

Data Source: *United States Department of Agriculture.*

As shown in Table 2-1, there has been a countywide increase of farm market value from \$6,724,000 in 2012 to \$8,714,000 in 2017. This change likely results from a combination of factors including the rising number of smaller farm operations and the diversification of types of farms. Farm operators whose principal occupation is farming decreased from 44.9% in 2012 to 37.4% in 2017. Over the same five-year period, the average age of farmers in Emmet County decreased from 59.1 years to 58.8 years, a slight reduction for the first time in recent history. Younger people will be needed to retain this viable part of our community and economy. Table 2-2 shows that the average farm has doubled its market value production in the five-year period identified. Additional data is available from the United States Department of Agriculture:

https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/Michigan/

Chapter 2: Agricultural, Natural and Cultural Resources

Change in Total Farm Market Value	
2012	2017
\$6,724,000	\$8,714,000
29.5% Increase	
Data Source: <i>United States Department of Agriculture</i> Table 2-1	

Change in Market Value of Production per Farm	
2012	2017
\$23,430	\$46,895
100% Increase	
Data Source: <i>United States Department of Agriculture</i> Table 2-2	

Agricultural Preservation Areas

There are pockets of prime agricultural land and some small prime farm communities throughout the county. Seven farm communities have continued to be significant farming centers: Resort Township, Bear Creek Township, Good Hart, Woodland Road in Maple River Township, Van Road in McKinley Township, Levering and Bliss. These prime agricultural lands and farm communities are illustrated on Map 2-1 as Emmet County Agricultural Preservation Districts and are areas intended to be preserved. The areas mentioned have been selected



Photo 9 Emmet County

because they have productive soil types, they have been designated prime/unique farmland by the United States Department of Agriculture (USDA), they are large unbroken tracts of agricultural lands, or they already exist as farming communities, including Centennial Farms. A resurgence of farming activity is occurring in Maple River Township, as young farmers are moving into the area with their families, farming their land and adding activities to supplement their farms. Given all the referenced data above, sustaining future agricultural production and active farming communities is essential to the economic diversity of Emmet County.

Chapter 2: Agricultural, Natural and Cultural Resources

Centennial Farms

Michigan Centennial Farms are a visible reminder of the social, cultural and economic contributions of Michigan farmers to Emmet County and the state's settlement and continuing development. Since 1948, the State of Michigan has recognized over 500 farm families for having achieved this milestone. According to the Historical Society of Michigan, there are 16 Centennial Farms in Emmet County.



Photo 10 Bear Creek Township

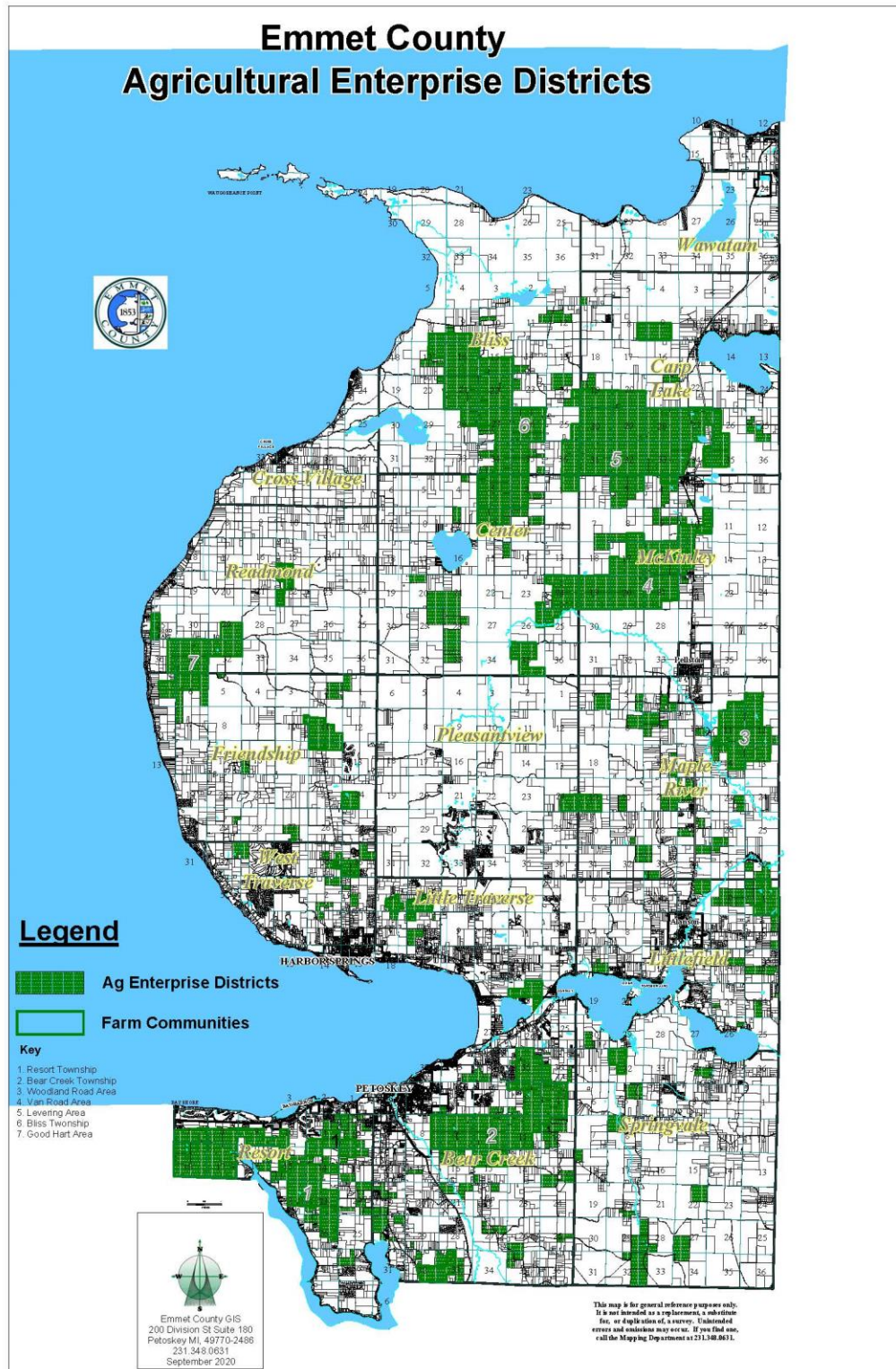
Vineyards/Wineries

A relatively new development in Emmet County is the establishment of vineyards. According to the USDA Census of Agriculture in 2007 there were 3 vineyards located within Emmet County. The earliest of which was established in 1994. As of 2019, there are 9 vineyards. Wine production in Michigan has skyrocketed in recent years with gallons of wine produced more than tripling in production since 2003. A 2017 Economic Impact Study conducted for the Michigan Grape and Wine Industry Council reports that Emmet County ranks 14th among Michigan counties for winery jobs with winery output of \$11,765,000. It further calculates the total direct output from wineries to be \$40,769,200 with a ranking of 15th among counties in Michigan.



Photo 11 Bear Creek Township

Chapter 2: Agricultural, Natural and Cultural Resources



Map 2-1

Chapter 2: Agricultural, Natural and Cultural Resources

Natural Resources

The natural resources of Emmet County are contributors to the sense of well-being enjoyed by both residents and visitors. These resources sustain and support the quality of life of those who live, work and play in the villages, cities and townships of the county. The economic health of County residents is also dependent upon the land and its resources. New development must occur in a fashion that protects and enhances existing land resources. Open space, in its many forms, contributes to the ambience of the area and is one of the reasons Emmet County receives so many seasonal visitors. Land use planners must consider resiliency when reviewing natural resources.

Natural Features - General Characteristics

Within the county, many state and federally protected wetlands, floodplains, lake and stream shorelines, woodlands, endangered and threatened species and vast regions of rolling hills exist. In addition to their aesthetic and recreational value, these resources provide a clean water supply and an economic base for tourism, forestry and agriculture. The natural environment helps define the quality of a community. The county is favorably endowed with clean air, clean surface and ground water and varied terrain. Citizens are acutely aware of the high quality of life created by the natural environment and appear to support strong policies in favor of environmental protection, as evidenced in the 2019 citizen survey. This stems from awareness of how past practices have had unintended consequences in the form of brownfields and superfund sites and the visible scars left by mining operations on the landscape.



Photo 12 Wycamp Lake

Chapter 2: Agricultural, Natural and Cultural Resources

Alteration of natural features has been standard practice in historic logging, past agricultural activity, mining operations, commercial and subdivision development. As knowledge of the value of these features has increased and as they become less available, more protections have been implemented by federal, state and local governments. The reasonable application of environmental laws and zoning, along with private efforts to conserve and protect, will help ensure that these valuable resources will be present for future generations to enjoy.

Some of the general benefits of protecting and conserving natural features:

- High-quality water for municipal and/or individual water systems
- Wildlife habitat preservation
- Groundwater recharge and purification, flood control, pollution prevention and the support of unique plant and animal life
- Recreational opportunities that include hunting, fishing, snowmobiling, skiing, skating, swimming, sledding, hiking, nature study, photography and related pursuits
- Aesthetics (views, serenity, inspiration, rural nature)
- Educational opportunities (natural history, biology, geology, ecology)
- Economic opportunities in farming, forestry and tourism



Photo 14 Waugoshance Point



Photo 13 Monarch Butterfly

Chapter 2: Agricultural, Natural and Cultural Resources

Wetlands

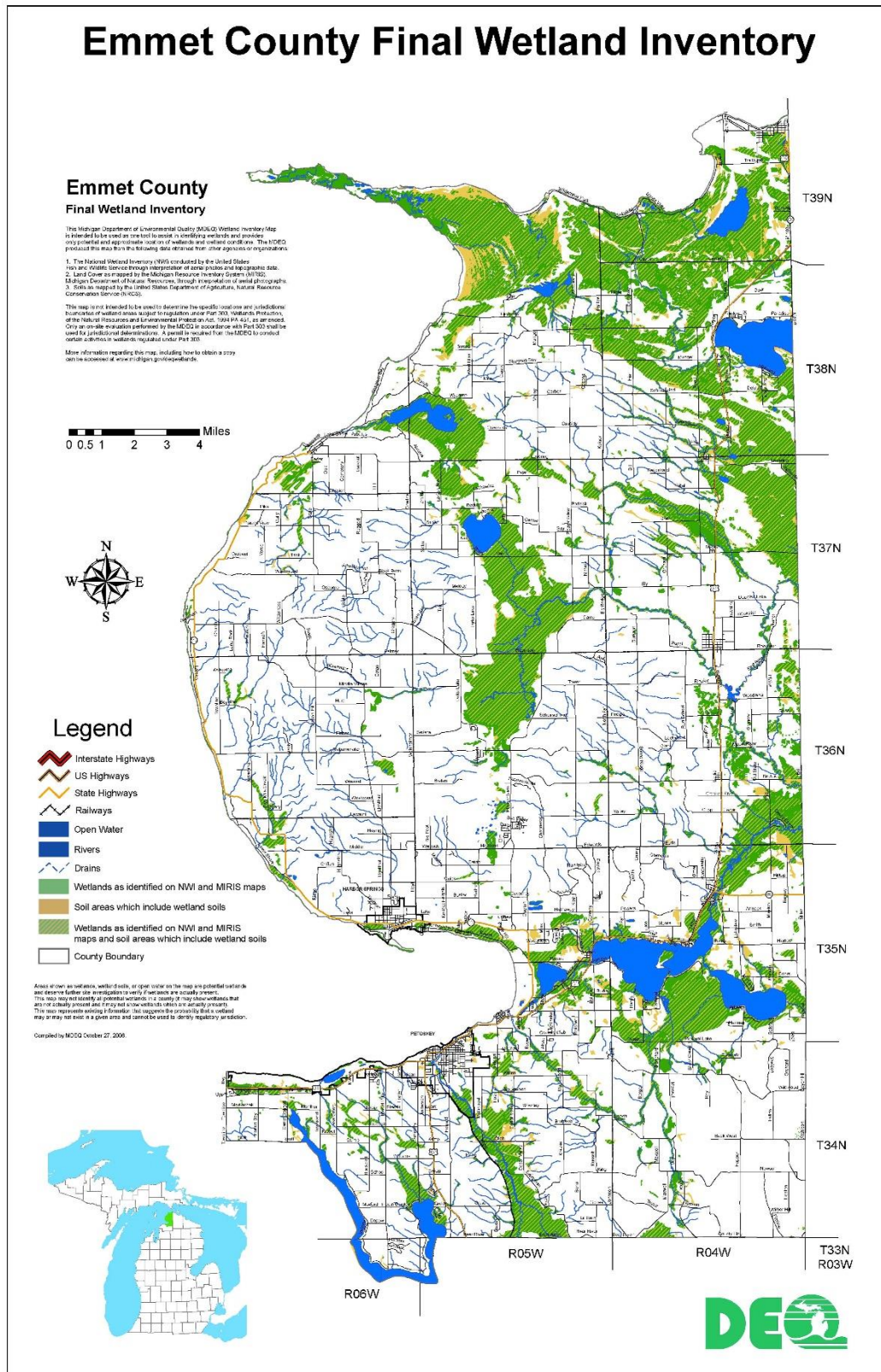
Wetland is the collective term for marshes, swamps, bogs and similar areas that are often found between open water and upland areas. Wetlands are found in virtually every part of the county. Wetlands are valuable natural resources that provide many important benefits to people and the natural environment. Wetlands help improve water quality, reduce flood and storm damages, provide important fish and wildlife habitat, support hunting and fishing activity and offer aesthetic features in the landscape.



Photo 15 Wetland Emmet County

County wetland maps, created by the State of Michigan and updated in 2006, show potential and approximate locations of wetlands and wetland conditions. They are available through the Michigan Department of Environment, Great Lakes and Energy (www.michigan.gov/egle). EGLE has a Wetland Identification Program to assist property owners with identifying the location of any wetlands on their property. Total acreage calculations indicate that there are 46,863.95 acres of wetlands in Emmet County. Wetlands identified in this plan are for general planning purposes only and may or may not be regulated by the State of Michigan. The general wetland map follows.

Chapter 2: Agricultural, Natural and Cultural Resources



Map 2-2

Chapter 2: Agricultural, Natural and Cultural Resources

Wetlands play a critical role in the function of the county's water-based resources. Acre for acre, wetlands produce more wildlife and plants than any other Michigan habitat type. According to the Michigan Department of Natural Resources, Michigan boasts about 2,300 native plant species. Fifty percent of these are wetland species and over 25 percent of the wetland species are threatened or endangered. In addition more than 40 percent of the 575 wildlife species in Michigan live in or utilize wetlands. This includes 10 to 15 of the 66 mammals, 180 of the 370 birds, 22 of the 28 reptiles and all of the 23 amphibians.

Benefits of Wetlands

Reduce flooding by absorbing runoff from rain and melting snow and slowly releasing excess water into rivers and lakes. (A one-acre swamp, when flooded to a depth of one foot, contains 325,851 gallons of water.)

Improve water clarity and quality by filtering pollutants from surface runoff, trapping fertilizers, pesticides, sediments and other potential contaminants; and breaking them down into less harmful substances.

Recharge groundwater supplies when connected to aquifers and contribute to natural nutrient and water cycles.

Provide commercial and recreational value to the economy by producing plants, game birds (ducks, geese) and fur-bearing animals. Survival of many varieties of fish is directly connected to wetlands that provide shallow water areas for breeding, feeding and escape from predators.

Produce vital atmospheric gases, including oxygen.

Serve as nutrient traps for adjacent water bodies such as the Great Lakes, inland lakes and streams.

Air Quality

Emmet County's natural features go beyond the physical beauty and splendor of Northern Michigan. In the late 1800s, the rail system served as the "Hay-Fever Express" for tourists escaping the allergy season. The fresh air of Emmet County provided its guests with relief from the symptoms produced by hay fever. Air quality plays a pivotal role in enriching the county's environment and the health of its citizens. It is typically measured in terms of volume of air pollutants. Air pollution comes from many different sources such as factories, power plants, cars, trucks, windblown dust and wildfires. Air pollution can threaten the health of human beings, trees, lakes, crops and animals, as well as cause damage to buildings. An air data report includes pollutant levels from one of the six criteria pollutants identified in the 1970 Clean Air Act.

Fossil fuels (coal, gasoline, diesel, natural gas, propane), are the single largest source of air pollutants in Emmet County. Licensed motor vehicles including automobiles, trucks, buses and motorcycles burn fossil fuels every day. Fossil fuels are also widely used for heating, electricity generation, manufacturing and other industries. Due to an economy based on tourism with limited manufacturing, Emmet County's air quality has remained nearly free of pollutants. Emmet County's air quality ranks "good" by the Environmental Protection Agencies "AirNow" monitoring program.

Chapter 2: Agricultural, Natural and Cultural Resources



Photo 16 Larks Lake

Forest Land

Forest lands moderate the effects of flooding, moderate micro-climates, protect soils from erosion, buffer noise, produce oxygen and clean some pollutants from the air. Woodlands and forested lands also are beneficial to the public as a renewable resource for many industries. The State of Michigan owns 76,218 acres of forest lands throughout the county. The majority of Emmet County's woodlands are deciduous forest land, made up of northern hardwood, central hardwood, aspen, white birch and lowland hardwoods. Coniferous forests within Emmet County are made up of pine, upland conifers, lowland conifers and Christmas tree plantations. Emmet County should strongly encourage preservation of state forest lands for their recreational, ecological and economic impact to the region.

A great opportunity may exist to establish a "community forest" project in areas east and north of the Village of Pellston. The land resource is available, with over 5,000 acres of public and semi-public land owned by the State of Michigan, Pellston Public Schools, the University of Michigan and Emmet County. Community Forest programs are administered by the Michigan Department of Natural Resources. With 5,000 acres, the broad scale outdoor use potential is substantial.

Emmet County has a varied timber stand with a quality stock of hardwoods. A significant area of the forest resource exists in small parcel ownerships, which by their nature are poorly suited for broad scale timber stand management (harvesting, processing and reforestation). However, there are values to these forests that go beyond commercial timber production. These values include the following:

Chapter 2: Agricultural, Natural and Cultural Resources



Woodlands are home to a variety of plants and animals. The different forest layers include canopy trees, herbaceous and coniferous understory and plant masses that lie on the forest floor. These provide breeding, feeding and refuge areas for many species of insects, birds, reptiles, amphibians and mammals. The environmental features of woodlands are important for wildlife conservation, environmental health and landscape diversity.



Woodlands are important protective features for watersheds and soils. Forest vegetation moderates the effects of winds and storms, stabilizes and enriches the soil and slows runoff from precipitation, thereby allowing it to be filtered by the forest floor as it permeates into groundwater reserves. By decreasing runoff velocity and increasing groundwater infiltration, woodlands also help to regulate flooding.



Woodlands are buffers to the sights and sounds of civilization. Woodlands mute the noise from highways and industrial activities by altering the tonal quality of sound waves. Where possible, woodlands should be protected and/or planted in areas between residential areas and major transportation corridors or industrial sites.



Emmet County's public and private woodlands support various activities and industries which strengthen the local economy. Camping, hiking and hunting and gathering all depend on healthy woodlands. Lumber is harvested and processed here for many industrial uses.



Woodlands are moderators of climate. The microclimate of a forest, created in part by the shade of the trees and the transpiration of water from the leaves, keeps surrounding air at an even temperature. Forest temperatures are generally cooler in the day and warmer at night than the more widely fluctuating temperatures of unforested areas. Woodlands in urban areas act as natural air conditioners and processors of air pollutants. Deciduous trees in particular are efficient at processing ambient pollutants. They are also our principal oxygen-producing source.

Chapter 2: Agricultural, Natural and Cultural Resources

Topography

Most of Emmet County's rolling topography spans the central portion of the county. This system of peaks and valleys is bisected by the Pleasantview wetland system which flows from Larks Lake south through Center Township. West Traverse, Friendship and Readmond townships share the west half of this topographic system that contains some of the most valued locations for recreation and scenic views. Outdoor recreation complexes such as Boyne Highlands and Nubs Nob have taken advantage of the steep slopes and surrounding areas for development of ski resorts. County roads, undeveloped private lands and public parks offer outstanding views of Little Traverse Bay, Lake Michigan and the rolling countryside. Other areas with significant slopes are in Bear Creek, Resort and Springvale Townships. Overall, topographic changes in Emmet County range from 582 feet to 1,300 feet above sea level. The steep bluffs along the Lake Michigan shore offer spectacular views of Lake Michigan and the Beaver and Fox chains of islands are visible on clear days.

Steep slopes, hillsides and bluffs are not renewable resources. Topography is a geological feature which contributes greatly to varied ecosystem opportunities while preserving distinctive features of the local landscape. The hilly backdrop to Walloon Lake and the bluffs along Lake Michigan are good examples of topography's contribution to the landscape. Varied topography within the county is a visual asset that enhances rural character with beautiful rolling vistas and recreational opportunities.



Photo 17 E. Mitchell Rd, Bear Creek Township

Chapter 2: Agricultural, Natural and Cultural Resources

Surface Water

Emmet County's water features include Lake Michigan, 28 inland lakes, rivers and numerous stream systems. Major inland lakes include Round Lake, Crooked Lake, Pickerel Lake and Walloon Lake in the southern portion of the county, Lark's Lake, Wycamp Lake, Paradise Lake, French Farm Lake and O'Neal Lake in the central and northern portions of the county. Burt Lake and Douglas Lake are located in Cheboygan County to the East, but because their watersheds are located within Emmet County, both lakes have significant influences on both counties. Many of the county's streams are quality fishing resources, while the Bear River, Crooked River and Maple River are the most significant canoe streams. The Michigan Resource Inventory System has identified 632 acres of streams, 9,605 acres of inland lakes and 75 acres of reservoir in Emmet County. This totals 10,312 acres, representing approximately 3.5 percent of the county's total area. Emmet County boasts 68 miles of Lake Michigan shoreline and countless miles of lake and stream shores. The Inland Water Route connects Lake Huron by a chain of lakes and rivers to its headwaters in Spring Lake in Bear Creek Township. Additional information regarding specific lakes in our region is available through Tip of the Mitt Watershed Council <https://www.watershedcouncil.org/inland-lakes.html>.



Photo 18 Harbor Point/Harbor Springs

Chapter 2: Agricultural, Natural and Cultural Resources

Spectacular views, clean and unpolluted surface waters and the tranquility of the lakes are all part of the natural ambience of Emmet County. Majestic shorelines invite outdoor enthusiasts to relax, play and marvel at their natural splendor. These resources contribute to a viable recreational economy. In addition to aesthetic values, clean and protected surface waters are critical to human health and safety.

They provide:

- Drinking water supply
- Irrigation supply
- Drainage and flood control
- Plant and wildlife habitat
- Safe recreational access (swimming, etc.)
- Supply of food (fish, waterfowl, etc.)

Lake Michigan

Water levels on the great lakes fluctuate over time as can be seen on the graph below. The water level changes can be extreme and may occur quickly. Currently lake levels are on the rise and projected to continue the upward trend in 2020. High water levels can lead to an increase of erosion and a loss of shoreline. Communities along the shoreline need to be prepared for both high and low water levels. One way Emmet County helps protect residents and property is by requiring a minimum setback of 60 feet from all surface water.



Great Lakes Water Levels (1918–2020)

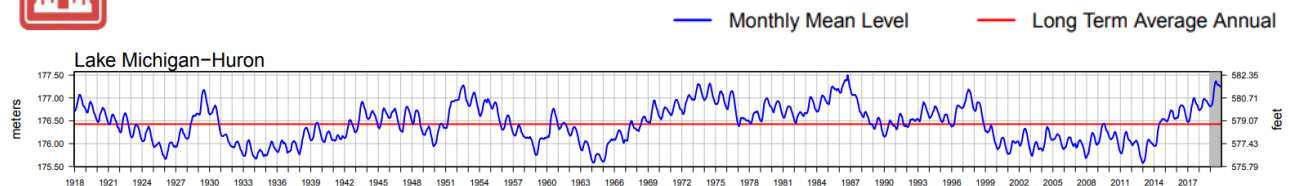


Figure 2-2

Photo 19 Little Traverse Bay

Chapter 2: Agricultural, Natural and Cultural Resources

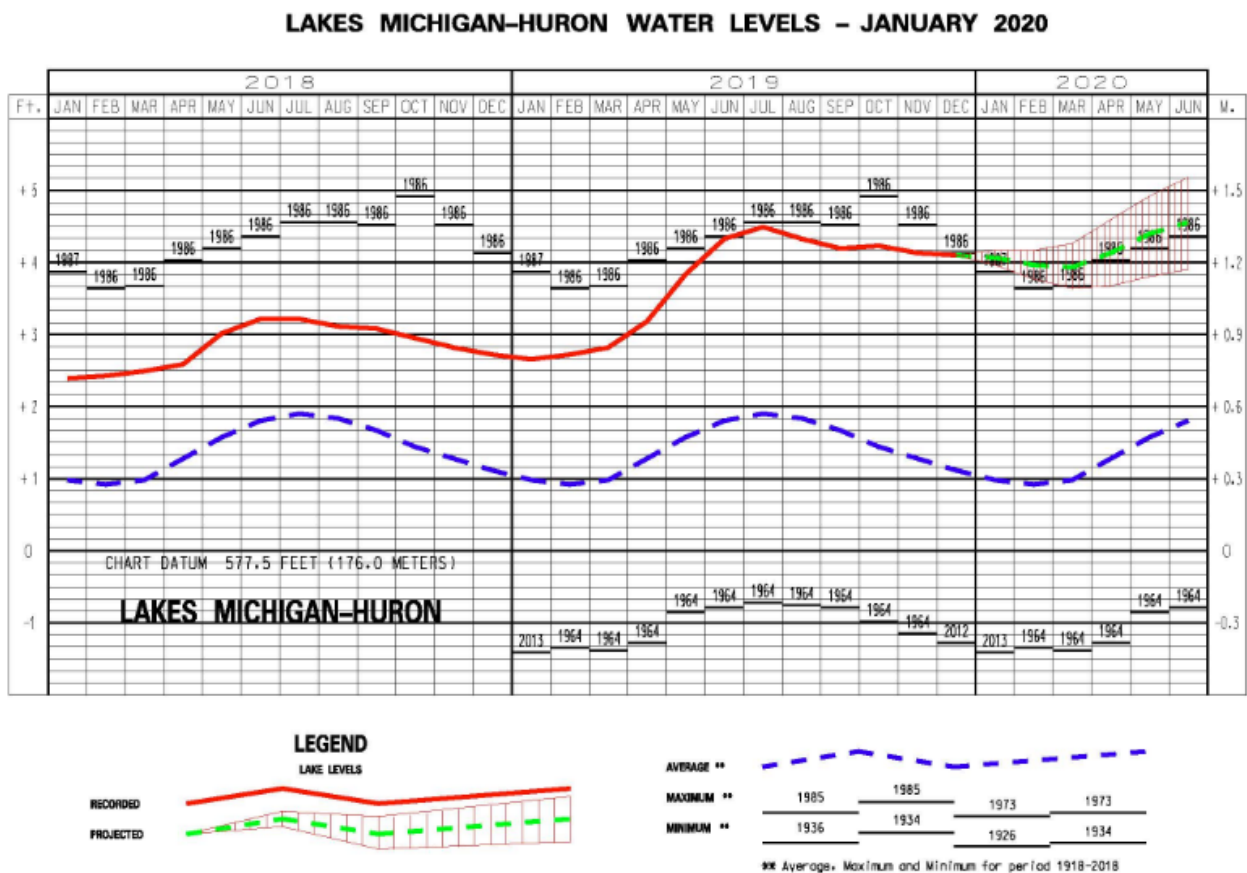


Figure 2-3

Groundwater

The abundance of surface water in Michigan is widely appreciated and international efforts have been undertaken to protect this resource. With two-thirds of the earth's surface covered with water, 97% of the world's freshwater is still available only as groundwater. Lakes, rivers and streams provide only 1.5% of fresh-water resources. The remaining 1.5% is found as water vapor in the atmosphere and as soil moisture. Protecting groundwater is critical to ensuring long term quality of this life-sustaining resource.

Almost 1/2 of the state's population and nearly all of Emmet County use groundwater as the sole source of drinking water. Because high-quality groundwater is almost wholly dependent upon the actions of people through their usage of the land, it is imperative to evaluate the impact of land use practices and changes in topography on groundwater impacts. Groundwater does not flow in vast underground rivers, it does not necessarily flow in the same direction as surface water and soils cannot safely protect groundwater from all potential contaminants.

Floodplains

The 100-year Great Lakes floodplain in Emmet County is identified by the Federal Emergency Management Agency (FEMA). A 100-year floodplain is an area within which there is a one percent

Chapter 2: Agricultural, Natural and Cultural Resources

chance of a flood occurring within any year. FEMA identifies floodplains to determine eligibility for the National Flood Insurance Program. Flood maps have been prepared for West Traverse, Little Traverse, Friendship, Cross Village and Readmond Townships and for the Village of Mackinaw City, the City of Petoskey and the City of Harbor Springs. Floodplain lands abut surface waters and generally follow creeks and streams. In 2018, FEMA proposed map updates. The proposal prompted the City of Harbor Springs to construct a stormwater system to manage runoff.

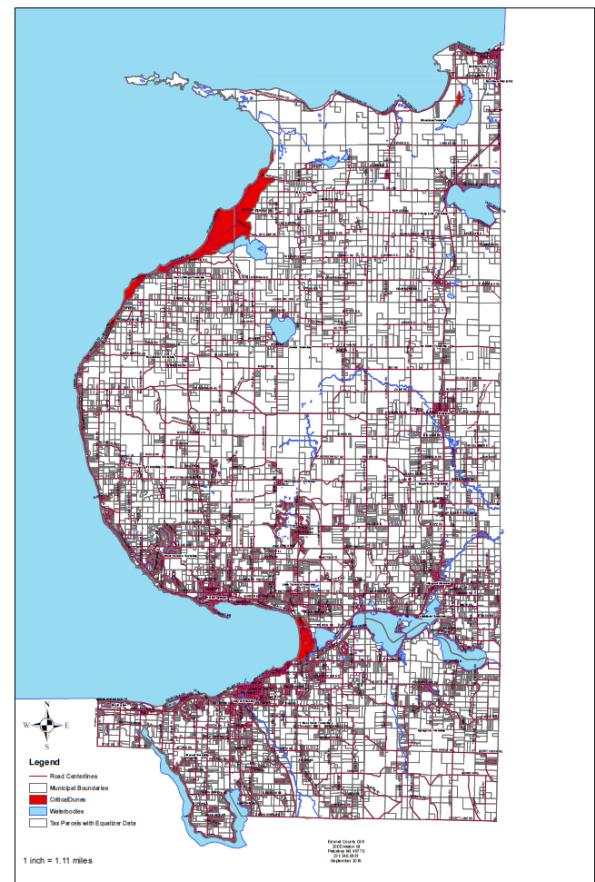
Floodplains are identified because they serve as natural water storage basins during periods of heavy rains or snow thaws. If this water were not accommodated in floodplains, the likelihood of flood damage to property would increase greatly. Engineered control systems are expensive and perhaps less reliable.

Sand Dunes

The longest stretch of fresh water dunes in the world borders Lake Michigan. Geologically young at about 10,000 years, these scenic dunes serve as a natural barrier to water or wind storm damage. They also provide a unique habitat for highly specialized plants and animals, some of which are threatened or endangered.

The lakefront orientation of the dunes has made them highly desirable sites for residential development. Part 353 of Public Act 451 of 1994, as amended, regulates sand dunes and is now enforced by the Michigan Department of Environment Great Lakes and Energy (EGLE). Changes to the Critical Dune laws occurred in 2013 prompting Emmet County and Little Traverse Township to repeal their local Dune Overlay District ordinances. The state law prohibits local jurisdictions from passing an ordinance which is more strict than the state statute. Critical dunes are located within Bear Creek, Cross Village, Bliss and Little Traverse Townships.

Dune formations have long been identified as unique features within Emmet County and are recognized for their contribution to the county's attractive natural setting. The dune environment contains a number of unique plant and animal communities that rely on the shoreline and dune areas for their survival. Dunes are characteristically unstable, fragile and prone to erosion by wind, water and human activity. Disturbance of the natural dune character by unregulated land use activities not only heightens the risk of erosion, but threatens ecosystems that support plant and animal life, including a number of state and federally listed threatened and endangered species. Owners of properties along the Lake Michigan shoreline should be aware of standards and regulations in place to protect the natural resources.



Map 2-3

Chapter 2: Agricultural, Natural and Cultural Resources

Dark Skies and Light Glare

Emmet County's night sky is a timeless and boundless resource, possessing value as a cultural, scenic, natural and scientific resource. Starry skies are part of Emmet County's allure, rural character and history. Early settlers used stars for calendars and navigation. Today, unfortunately, artificial lights threaten to destroy the spectacular views and marvels revealed by a dark sky. Light glare can also be hazardous to individuals while driving a vehicle or trying to safely navigate a boat. Managing outdoor lighting will conserve energy, reduce glare, maintain views of the night sky and preserve the rural character of Emmet County.

Pollution can occur in the following forms:

Sky Glow – When the overhead clouds glow a strange pink, white and orange from improperly aimed and placed light fixtures.

Clutter - Groupings of lights that generate confusion and distract from obstacles, including those that they may be illuminating.

Light Trespass – When light crosses property lines, illuminating the neighboring property.

Glare – Too much light applied and concentrated to an area.

Dark Sky Park and Dark Sky Coast

As urban populations lose their view of dark skies, they often gain a new-found appreciation of the night skies of Emmet County. Since many individuals from the urban areas cannot enjoy a star-filled night, they are generally more grateful for places such as Emmet County, where they can view the blanket of stars in the sky.

The Headlands County Park was awarded the International Dark Sky Park designation in May 2011. Numerous dark sky programs are offered at the park as well as night sky observing. A designated dark sky trail and viewing areas along the lakeshore are open to the public.

Chapter 2: Agricultural, Natural and Cultural Resources

Public Act 251 of 2012 protects the night sky above nearly 21,000 contiguous acres of land in northwestern Emmet County from the effects of light pollution and light trespass. The protection area encompasses Cecil Bay and Headlands county parks, Wilderness State Park, plus certain state-owned lands in Bliss, Cross Village and Wawatam Townships. Public Act 251 does not place requirements on the land owner; it simply requires that any lighting on the included public lands be directed downward and, where practical, be on sensor fixtures so as not to interfere with the view of the night sky. This legislation reiterates the importance of preserving our dark sky natural resources. It provides not only natural resource benefits, but it also benefits the economy of Emmet County and Michigan.



Photo 20 Headlands International Dark Sky Park

Invasive Species

Invasive species are non-native species that have become established or have the potential to become established and out-compete the native flora and fauna. According to the Department of Natural Resources website, it is estimated over 200 invasive species have already been introduced to the Great Lakes basin. They pose a significant threat to our local biodiversity and economic viability. Increases in the population of invasive species can lead to reduced property values, increasing costs of control and management, as well as loss of valuable natural resources and biodiversity.

In 2010, the Emmet County Board of Commissioners adopted the Phragmites Control Ordinance. The adoption of the ordinance allowed for a more coordinated effort in the management of phragmites. The county partnered with Tip of the Mitt Watershed Council to carry out the mapping of locations of phragmites within the county and the follow up application of herbicide as part of an overall management plan. The program continues and is permitted annually.

In 2011, the Paradise Lake Improvement Board partnered with Little Traverse Bay Bands of Odawa Indians' Natural Resource Department and State of Michigan Department of Natural Resources to install a boat washing station at the Department of Natural Resources public access boat launch on Paradise Lake. The purpose of the boat station is to reduce the chance of spreading or transporting invasive species into or out of Paradise Lake. This boat-washing launch now plays a vital role in minimizing the transfer of Eurasian Milfoil and zebra mussels already present in Paradise Lake.

Chapter 2: Agricultural, Natural and Cultural Resources

In 2015, the four-county Charlevoix, Antrim, Kalkaska, Emmet – Cooperative Invasive Species Management Area (CAKE CISMA) was established as a joint effort between local conservation districts and various nonprofit organizations to collaborate on education about and management of harmful invasive species. Its mission is to protect the natural resources, economy and human health in northern Lower Michigan through collaborative outreach and management of invasive species. The organization offers educational programs including events, discussions and integrated workshops. It also surveys and treats invasive species throughout its service area.

Cultural Resources

Cultural resources of the county are broadly defined and richly inclusive. The cultural resources of any community help to establish that “sense of place” or the “connectedness” of a community’s collective being. Cultural resources are the bonds that define a community. They are the commonality among its citizens and give its visitors a sense of understanding about that community. Detailed in this section are the resources providing history, the arts and outdoor activities that serve to communicate and define Emmet County’s cultural heritage.



Photo 22



Photo 21

McGulpin Point emmetcounty.org/parks-recreation/mcgulpin-point-lighthouse

In 2008, the Emmet County Board of Commissioners purchased the McGulpin Point Lighthouse, an historically significant feature and property in northern Emmet County. The lighthouse is located west of Old Mackinac Point Lighthouse within the Village of Mackinaw City. Constructed in 1869, the lighthouse served as a beacon for 37 years before being decommissioned and sold to a private land owner. Acquiring the property for public ownership ensured the preservation of the lighthouse for everyone.

Bay View Association bayviewassociation.org

The Bay View Association within Bear Creek Township is an incorporated summer resort that was established in 1875 by a group of Methodist ministers and is today a National Historic Landmark. Broad cultural programming was developed under the direction of John M. Hall, who in 1885 was appointed superintendent of the "Chautauqua Educational Department." The Chautauqua offered reading programs, university-level summer courses and other activities. Today the community offers summer activities available to the public, including a nationally renowned Music Festival, nationally known speakers and religious, cultural, social, recreational and educational programs.

Chapter 2: Agricultural, Natural and Cultural Resources

Little Traverse Historical Society petoskeymuseum.org

The Little Traverse Historical Society in Petoskey operates the Little Traverse Historical Museum, housed in the former Pere Marquette train station built in 1892. Its mission is to enrich our community by preserving, showcasing and sharing the history of the Little Traverse Bay area. It offers walking tours, kids' programs and other events from May to December.

Crooked Tree Arts Center crookedtree.org

The Crooked Tree Arts Center is a 25,000 square foot restored former Methodist Church located in downtown Petoskey. Founded in 1971, the Arts Center features four galleries, a theater, dance studio, classrooms, a culinary arts kitchen and much more. With approximately 1,600 members, the Crooked Tree Arts Center serves the residents of Charlevoix and Emmet Counties. Programs are offered in the visual arts, performing arts and arts education. Concerts, lectures, exhibits and classes are available year round to meet the needs of residents and visitors to the community.

Little Traverse Bay Bands of Odawa Indians ltbbodawa-nsn.gov

The Ottawa (Odawa) people have been in this geographical region of Michigan since long before the Europeans arrived. The Odawa were a migratory people, traveling from the Upper Peninsula and the northern tip of lower Michigan in the fall to the southern part of Michigan where the climate was more hospitable during the winter months. In the spring, the Odawa people returned to their homelands to collect maple syrup, fish and plant crops. When they weren't tending their gardens or doing their day-to-day chores, they gathered fruits, herbs, medicines, as well as any other food products they could dry and put away to be used during the long winter months.

After the Europeans came and settled in, the Odawa ceased to migrate to the southern areas of the state. This was due to the new immigrants or early settlers who brought with them new food staples and work, which the tribal people took advantage of. Permanent housing, schools and churches were then established and the native people went to work for the settlers or began their own businesses to make their living.

After the 1836 and 1855 treaties were signed, the benefits that the US Government promised to the tribes, did not materialize. The Ottawa's from this area began to organize to sue the US Government to try to recover monies agreed upon from the government. Federal courts would not recognize Northern Michigan Ottawa Association (NMOA) Unit 1, because they were an organization. The tribe reorganized and took the name Little Traverse Bay Bands on November 29, 1982. Again, the federal court would not allow the tribe its rights, this time because it was not a federally recognized tribe. On Sep. 21, 1994, President Clinton signed the bill that gave the Little Traverse Bay Bands of Odawa Indians federal recognition through Reaffirmation. The Tribe has approximately 4,500 members, with a large number living within Charlevoix and Emmet counties. The Little Traverse Bay Bands of Odawa Indians employs over 800 full and part-time employees.

Chapter 2: Agricultural, Natural and Cultural Resources

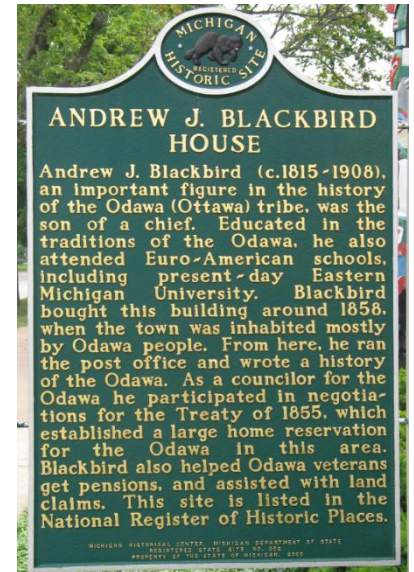
Andrew J. Blackbird Museum

harborspringslibrary.org

Andrew Blackbird was the first postmaster in Harbor Springs and his home also served as the first post office in the community. In 1952 the doors of Andrew J. Blackbird's former home and office were opened and a museum was established to preserve Native American history and culture.

Harbor Springs Area Historical Society (HSAHS) harborspringshistory.org

Since its inception in 1990, the Harbor Springs Area Historical Society's mission has been to preserve this area's history for future generations. In 2003, HSAHS embarked upon the renovation of the original city hall, built in 1886 as the Emmet County seat. This Victorian-era building, located in close proximity to other historically significant buildings on Main Street, was adapted to house a history museum and opened in the Fall of 2008. The museum features dynamic and interactive exhibits designed to educate the young and young-at-heart.



Mackinaw Historic Village mackinawhistory.org

In 2004, the Mackinaw Area Historical Society (MAHS) created a partnership with the Village of Mackinaw City to create a historic village. Located on approximately 143 acres of land just west of Mackinaw City, the village is open to visitors who can enjoy discovery trails, historic buildings, a covered pavilion, a restored log home, a sawmill and much more. The MAHS collects, catalogues and owns the artifacts used in the buildings. MAHS offers lively local monthly programs featuring informative presentations on historically significant topics.

M-119 "Heritage Route" m119tunneloftrees.org

Locally known as the "Tunnel of Trees," this drive's scenic beauty is breathtaking in the spring and summer and offers a special majestic allure during the peak of the autumn color season. In 1997, with much support, M-119 was granted Heritage Route (now known as a Scenic By-Way) status from MDOT. The Heritage Route Program is designed to identify, inventory, protect, enhance and, in some cases, promote state trunk lines and adjacent land with distinctive or unique scenic, cultural, or historic qualities. The Heritage Route Committee strives to protect, preserve and enhance the natural, scenic and cultural character of the M-119 Heritage Route.



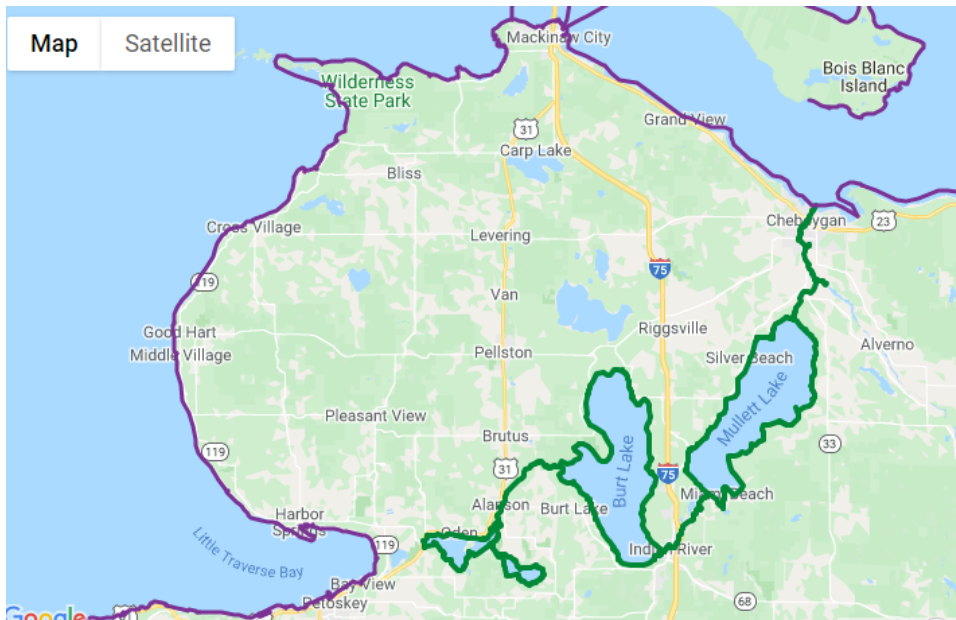
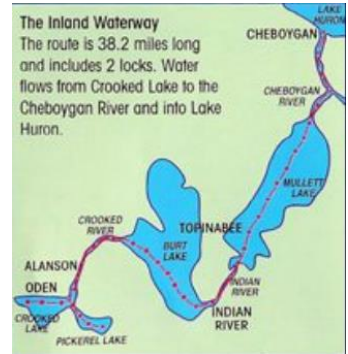
Photo 23 Lake Shore Dr. "Tunnel of Trees"

Chapter 2: Agricultural, Natural and Cultural Resources

Inland Water Route Historical Society (IWRHS)

iwrhs.wordpress.com

The IWRHS was established in 2004 with a mission to maintain and preserve the history of the Inland Water Route of Northern Michigan. In 2006, the society purchased the old Alanson City Hall, originally built in 1926 and newly renovated. The historic building houses a museum that features an extensive collection of historic photographs as well as books and artifacts pertaining to the fishing, boating and tourism culture that sprang up along the inland route. The inland waterway connects Crooked Lake to Lake Huron via a series of lakes and rivers and since the time of the first people, has been an important trade and transportation route. Interactive maps of the route and other water trails are available through michiganwatertrails.org.



Emmet County Historical Commission (EHC)

emmetcounty.org/officials-departments/historical-commission/historical-commission-minutes/

Created in 2008, the EHC was established to advise the Emmet County Board of Commissioners in matters relating to history, develop historical programs, activities, projects and services and perform other duties as assigned by the Board.

Chapter 2: Agricultural, Natural and Cultural Resources

Great Lakes Center for the Arts (GLCFA) greatlakescfa.org

GLCFA opened in the summer of 2018 with a mission to inspire, entertain and educate through the performing arts with year-round, world-class performances. GLCFA offers unique cultural performances and events across all genres – music, dance, theater, movies and film, intellectual dialogue and education – making it a regional and national performing arts destination.



Photo 24 Great Lakes Center for the Arts/Bay Harbor

Hunting michigan.gov/dnr

Hunting and fur trapping were historically the first basis for commerce in Northern Michigan. Deep forests and thick swamps provided habitat for a range of game birds and animals. Today, many acres of wild habitat remain, sustaining the sport of hunting.

The elusive white tail deer is the most sought-after game animal in Emmet County and has created its own cultural identity. Once a critical time to secure food for the year, the annual deer-hunting season has become one of the most widely observed outdoor rituals in northern Michigan. During the weeks

Chapter 2: Agricultural, Natural and Cultural Resources

preceding the November 15th season opener, hunters throughout the county work to prepare for the trip to deer camp.

Deer camps allow one to take part in a cultural legacy and share in the camaraderie with fellow hunters. When at deer camp, the outside world does not exist in the mind of a hunter. The food, storytelling, companionship and escape from everyday life create an enduring tradition enjoyed by generations, whether or not venison is a product of the hunt.

Mushroom Hunting

canr.msu.edu/news/wild_mushroom_certification_courses_scheduled

Morel mushroom hunting has been a part of our culture for decades and draws groups of people from all over Michigan and surrounding states. Residents and non-residents alike drive along country roads looking for the preferred habitat of these delectable treats. Just as in other types of hunting, the hunt isn't always successful. Those who do find morels seldom dispense information on the location of their discovery. Well-guarded hot spots and sworn oaths of secrecy between friends and family are all part of the mushroom-picking culture. Mushroom hunting is fun for people of all ages and provides an avenue for individuals to reconnect with nature. The hobby has become a lucrative business for some, as premium prices are paid for this tasty fungus which finds its way to the kitchens of the world's most discriminating restaurants. Other species of mushrooms are found throughout Emmet County. MSU Extension offers a program titled *Wild Mushroom Foraging Certification* for those interested in selling mushrooms or for those interested in learning about mushroom identification.



Photo 25 White Morel Mushrooms

Petoskey Stones “*Hexagonaria percarinata*”

Petoskey stones are composed of fossilized coral from the ancient Devonian period, 350 million years ago. Long ago, these coral colonies inhabited the warm sea waters that once covered the State of Michigan. As a result of glacial movement 1.6 million years ago, stones from the bedrock were plucked up and deposited throughout Emmet County. Today, these stones are commonly found on the beaches, sand dunes and vast glacial deposits along Lake Michigan. In 1965, the stone's popularity elevated it to the status of the State Stone of Michigan.



Photo 26 Petoskey Stones

The coral patterns of the Petoskey stone resemble a honeycomb of tiny suns and their rays. For many years, searching for these fossils has been a favorite activity for visitors to the area. Today, Petoskey stones continue to be a popular trophy. Their patterns are subtle: best seen when wet or polished to a glossy sheen. These soft limestone fossils can be bought in gift shops throughout the state, hand polished and shaped into an array of

Chapter 2: Agricultural, Natural and Cultural Resources

items. Petoskey stones can be found by combing the beaches of Little Traverse Bay and Lake Michigan.

Fishing

The clear blue waters of Emmet County provide superb habitat for all kinds of fish. Lake trout, steelhead and salmon are caught in Little Traverse Bay while the inland lakes supply anglers with pan fish, northern pike, walleye and the occasional muskie. Rainbow, brown and brook trout are stalked by fly fishermen in County rivers.

A four-season climate offers anglers opportunities to fish year-round. A diversity of wildlife practically guarantees sightings of osprey and bald eagles, ducks and their fuzzy ducklings, graceful white swans, muskrat or beaver. The day might begin with the sounds of a loon calling the angler to action.



Photo 27

Ice fishing is great sport for the fisherman willing to brave the cold weather and venture onto the ice. When the bay and lakes freeze into a solid surface, it's time to try an entirely different kind of fishing. For many hardy souls, the months between December and April can be the most enticing time of the year. Shanty towns spring up on the lakes to provide protection from the elements and the sport takes on a social atmosphere. Anglers meet at their shanties to exchange fishing tips or share some grilled food or hot soup. Whether seeking the silence of a winter day or the good company and tales of other anglers, the anticipation of pulling a good catch through the ice is all part of Emmet County culture.

Recreation

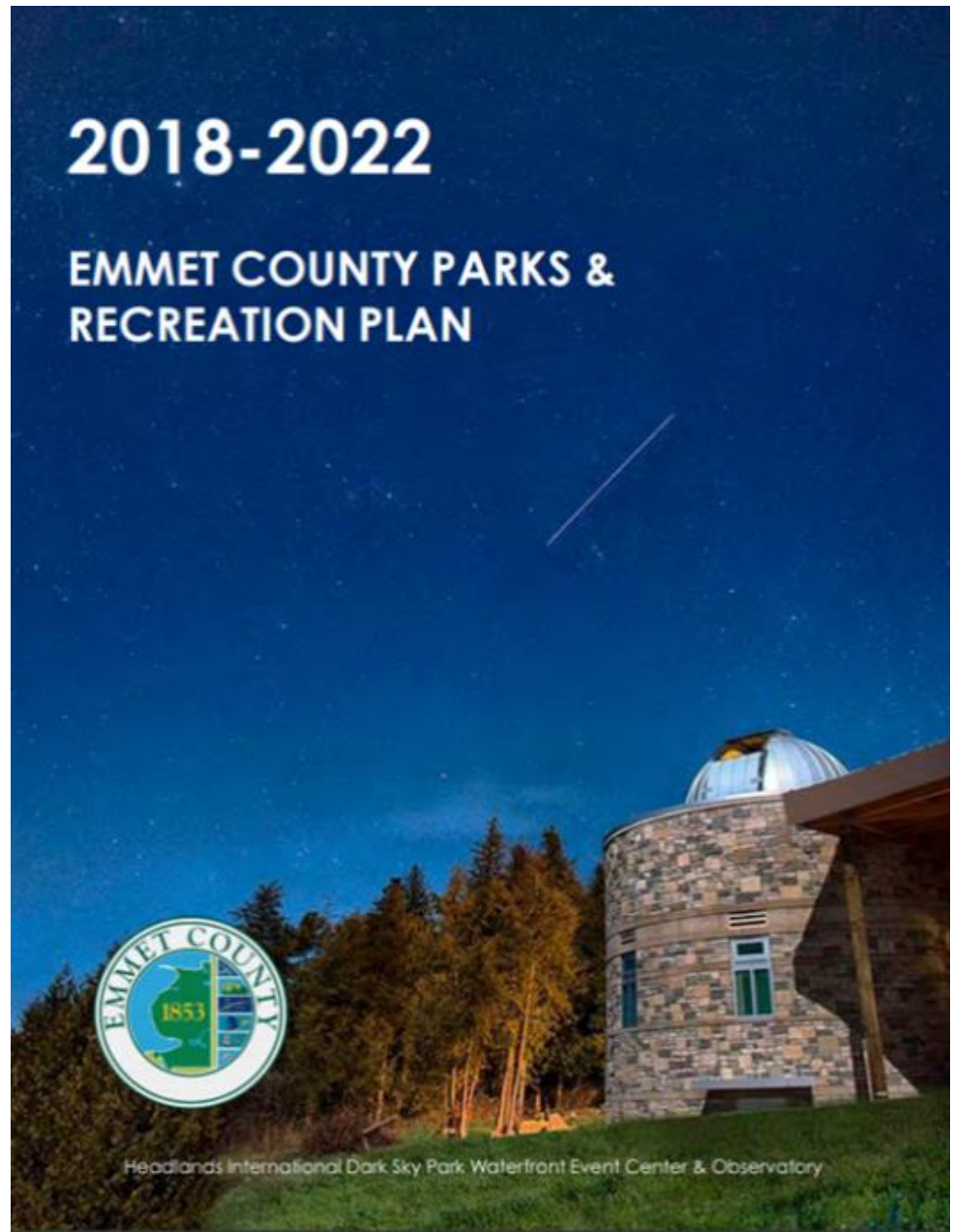
Emmet County is a four-season paradise, offering numerous recreational opportunities. It is because of this rich diversity of recreational activities that Emmet County is known as a world-class resort community.



Photo 28 Boyne Highlands, Pleasantview Township

Chapter 2: Agricultural, Natural and Cultural Resources

The county operates three active parks and manages several passive park lands which are summarized throughout this Master Plan. Because of the vast amount of recreational opportunities and the high priority placed on recreation in Emmet County, a separate Parks and Recreation Plan is prepared and updated every five years. The Parks and Recreation Plan is considered an integral part of this Master Plan.



For the complete Plan visit:

https://www.emmetcounty.org/wp-content/uploads/2015/04/PR_2018_PARKS_AND_RECREATION_PLAN.pdf