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**Northern Michigan and Eastern Upper Peninsula
Knowledge Economy Strategies Project
Co-Learning White Paper #**

Innovative Development and Strategic Promotion of Ecotourism in Northeast Michigan

**Michigan State University
Center for Community and Economic Development**

in cooperation with the

Northeast Michigan Council of Governments
Alcona, Alpena, Cheboygan, Crawford,
Montmorency, Oscoda, Otsego, Presque Isle Counties

Northwest Michigan Council of Governments
Antrim, Benzie, Charlevoix, Emmet, Grand Traverse,
Kalkaska, Leelanau, Manistee, Missaukee, Wexford Counties

**Eastern Upper Peninsula
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**EDA Northern Michigan and Eastern Upper Peninsula
Knowledge Economy Strategies Project
Co-Learning Report Series**

In October 2008, the Michigan State University Center for Community and Economic Development (CCED) initiated a project with the support of the U.S. Department of Commerce Economic Development Administration (EDA) to develop innovative economic development strategies with three Northern Michigan regional planning partners: the Eastern Upper Peninsula Regional Planning and Development Commission (EUPRPDC), Northeast Michigan Council of Governments (NEMCOG), and Northwest Michigan Council of Governments (NWMCOG). The goal of the project is to create new knowledge-based economic opportunities in the regions and to successfully compete in the global knowledge economy.

An assessment of each region's Comprehensive Economic Development Strategy (CEDS) identified strengths, weaknesses, and opportunities, and helped each region to develop their collaborative learning (co-learning) plans. Co-learning plans are designed to provide regional planners and their stakeholders with relevant new knowledge, focus, and capacity. This new knowledge and capacity serves as a platform for regional planners and stakeholders to create innovative regional economic development strategies focused on competing in the global knowledge economy. By understanding the dynamics and demands of global knowledge economy forces, regional leaders can better align their regional investment priorities with those demands.

Disclaimer

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This co-learning report consists of the following eight sections:

I. Overview and Co-Learning Objectives

The Northeast Michigan Council of Government (NEMCOG) requested the MSU Center for Community and Economic Development project team to investigate opportunities for small businesses in the outfitter, tourism, ecotourism and hospitality industries. In response to this request, the project team identified ecotourism as a sector with growth potential that could accelerate regional economic development.

As a new/emerging economic sector, ecotourism is generally underdeveloped, and there are good reasons to reverse this neglect. According to the Commission for Environmental Cooperation[1], North American (U.S., Canada, and Mexico) travel and tourism represented 11.6% of total GDP, 12% of total employment, and 10% of total capital investments in 2000. Tourism is the world's largest industry and one of the fastest growing. Another researcher asserts that "ecotourism has become the most rapidly growing and most dynamic sector of the tourism market…" Since the 1990s, ecotourism and nature tourism have grown 20%-30% per year, and this growth is three times greater than the traditional tourism industry in 2004.[2] This growth of nature tourism including ecotourism could create an estimated economic impact of $473.6 billion per year.[3]

In Michigan, this economic benefit from tourism/ecotourism was explored by the MSU Department of Park, Recreation and Tourism Resources. According to their study[4], for example, Pictured Rocks National Lakeshore on Lake Superior in the Michigan's Upper Peninsula hosted 421,000 recreation visits in 2001. Visitor spending has a significant impact on the local economy and job opportunities; visitors to Pictured Rocks spent $14.8 million dollars which contributed $4.6 million to the local residents' personal income and added 426 jobs. About 35% of the visitors' spending went to accommodations (motel, hotel or cabins), and 19% went to restaurants and bars. Half of the region's (east of Munising in Alger County) tourism spending resulted from park visitors.

This research suggests that tourism and ecotourism has significant potential in Northeast Michigan. Our co-learning research aims to provide a preliminary assessment of the ecotourism industry in the region and to identify viable ways to expand this sector.

In order to give empirical support to this analysis, the project team first conducted a literature review to identify ecotourism concepts and definitions and related information. The team also reviewed ecotourism development initiatives in Ontario, Canada and three regions in the U.S. as potential models for Northeast Michigan ecotourism strategies and promotion.

The team generated a contact list of 121 companies in the region that was surveyed by phone, first class mail, and an emailed link to a web site to identify ecotourism businesses, the characteristics and activities of those businesses, and their needs and concerns. Finally, recommendations for designing ecotourism strategies were developed.

II. Literature Review

1. Ecotourism: Concepts and Definitions

The project team conducted a literature review to elucidate the concept and multiple definitions of ecotourism. Substantial research on ecotourism has been carried out since the early 2000s with increasing attention on issues related to sustainability[5]. Ecotourism studies were initially conducted in the 1980s.[6] Various definitions of ecotourism have been developed without a clear consensus.

Not surprisingly, Caroline Kuenzi and Jeff McNeely (2008) pointed that one of the key challenges related to ecotourism is the lack of definitional precision. Hector Ceballos-Lascurain, a Mexican architect, environmentalist, and international ecotourism consultant, provided the first definition of ecotourism in 1987 at a forum on the "Conservation of the Americas."[7] His definition is that ecotourism is "travel to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery and its wild plants and animal, as well as any exciting cultural manifestations (both past and present) found in these areas." Since then, various scholars and institutions have sought to define ecotourism.[8] (Please see Table 1)

Distinguishing ecotourism from other similar terms presents another definitional challenge. Those terms paralleling or overlapping with ecotourism include nature-based tourism, nature tourism, and sustainable tourism. Nature-based tourism provides the broadest definition as it describes 'the segment in the tourism market in which people travel with the primary purpose of visiting a natural destination.'[9] Nature tourism refers to traveling to unspoiled places to experience and enjoy nature. Sustainable tourism considers both social and environmental issues; community involvement is fundamental to sustainable tourism (Stem et al., 2003; Ryan, 2003; Sofield, 2003).

Table 1: Ecotourism definitions and sources

Researcher/Org. (Year)	Definition
1. Hector Ceballos-Lascurain (1987)[10]	Travel to relatively undisturbed or uncontaminated natural areas with the specific objective **of studying, admiring, and enjoying** the scenery and its wild plants and animal, as well as any exciting cultural manifestations (both past and present) found in these areas.
2. The International Eco-tourism Society (TIES) (1991)[11]	Responsible travel to natural areas that **conserves the environment and sustains the well-being of local people.**
3. The International Union for Conservation of Nature, IUCN (1996)	Environmentally responsible travel/visits to relatively **undisturbed natural areas** to enjoy and **appreciate nature** (and accompanying cultural features) that **promotes conservation**, has limited adverse visitor impacts, and provides beneficial socio-economic involvement of local communities.
4. Diamantis D. (1999)[12]	Emphasis on **education, sustainability, local benefits** and control, and **'natural' locations**.
5. David Bruce Weaver (2001)[13]	A form of nature-based tourism that strives to be ecologically, socio-culturally, and economically-**sustainable** while **providing opportunities for appreciating and learning about the natural environment.**
6. A¨.P. Lino grima (2003)[14]	Tourism that is both **environmentally sustainable** and motivated by **enjoyment of nature.**
7. Awange, Joseph L., Ong'ang'a, Obiero (2006)[15]	Environmentally responsible travel/visits to relatively **undisturbed natural areas to enjoy and appreciate nature** that promotes **conservation of natural and cultural heritage**.

Key elements: 1) natural area, 2) education, 3) sustainability.

In previous ecotourism studies, three key elements have been used to define the term: 1) natural area, 2) education, and 3) sustainability. The single most distinguishing characteristic of ecotourism from other kinds of tourism, then, is its emphasis on the educational experiences enjoyed by its customers. The definitions developed by Hector Ceballos-Lascurain and The International Eco-tourism Society (TIES) have contributed significantly to other definitions of ecotourism. The TIES definition is widely used by scholars and institutions.

For the purpose of this research, we define **ecotourism** as **"environmentally-sustainable tourist activities in relatively undisturbed natural areas to enhance the appreciation of and learning about natural ecosystems while providing benefits to local communities."**

2. Three Ecotourism Elements Applied to Identify Ecotourism Companies

Since the ecotourism companies has not been clearly differentiated from traditional tourism companies in the Michigan region, and this research aims to identify ecotourism companies, the three elements of ecotourism have to be elucidated in order to distinguish from non-ecotourism companies.

However, there have been no unified ways to identify ecotourism companies with these three elements. From a review of literature, ecotourism companies have been identified

with different criteria. Some studies used all the three elements (Tourism Queensland; 1999) while others used no specific criteria (Nick Kontogeorgopoulos; 2004). Table 2 shows the three levels of ecotourism that John N. Shores introduced in 1995, and each level has different contents and elements. He suggested six levels of ecotourism, and in this study, we used his concept of level in order to classify ecotourism companies rather than confining ecotourism companies to one single boundary.

Three levels of ecotourism will be briefly described to distinguish ecotourism companies from traditional tourism companies. We used three elements to identify ecotourism companies: 1) natural location refers to whether ecotourism takes place in a protected or vulnerable area; 2) education refers to whether ecotourism business provides education to tourists; and 3) environmental and social issues refer to whether tour activities preserve the environment and benefits local communities.

Table 2: Ecotourism levels and Elements

Levels	Content	Elements
Level 1	Incidental Nature Travel	Natural area
Level 2	Personal participation to support the environment	Natural area and Education, Sustainability (low or absence)
Level 3	Entire system is operating in an environmentally sound way	Natural area , Education , Sustainability (high)

*These three levels of ecotourism are based on ecotourism levels developed by John N. Shores.[16]
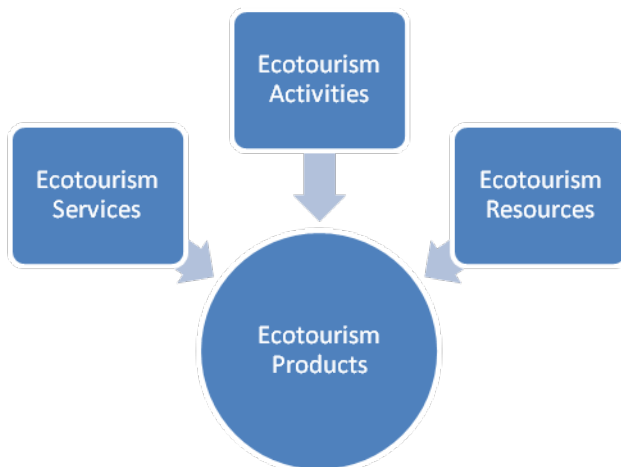
Figure 1. Ecotourism Products

Ecotourism companies provide their ecotourism products with a combination of services, activities and resources.[17] (See Figure 1) Ecotourists experience these ecotourism products as ecotourism trips which are mixed with sport activities or cultural experiences that are sometimes offered together in nature areas.[18] Because of Northeast Michigan's rich and abundant natural resources, this survey will focus on sport activities. Sport activities can be divided into two types: land-based and water-based. The major land-based sport activities are hiking, biking, horseback riding, hunting, skiing, snowshoeing, and snowmobiling. Water-based activities mainly refer to boating, canoeing, kayaking, rafting, underwater diving, fishing, and fly fishing. In addition to the businesses that provide sport activities, camping and hospitality businesses were included for the survey because a number of campsites and lodges provide various kinds of sport activities as one of their products. Table 3 shows the types of ecotourism activities based on the type of natural resource in the region.

Table 3: Ecotourism activities based on type of natural resources

Natural Resources / Category	Land-based	Water-based
Tours/Activities	Hiking Biking Horseback Riding Hunting Skiing(downhill/xc) Snowmobiling Snowshoeing	Boating Canoeing Kayaking Rafting Underwater Diving Fishing Fly fishing
Accommodations	Camping, Lodges, cabins, and guest houses	

3. Ecotourism Development Initiatives Globally and in the U.S.

In the discussion with Sea Grant and Northeast Michigan Council of Government, Queensland, Australia was identified as one of the most popular destinations in which ecotourism activities can be enjoyed due to its rich biodiversity and the province's strong support for its ecotourism industry. The Ontario, Canada provincial governmental also demonstrates leadership in creating it through resource-based recreation tourism plan. The information of Queensland ecotourism could be found at http://www.tq.com.au/.

Several ecotourism initiatives are also apparent in the U.S. These U.S. ecotourism initiatives were introduced in "Ecotourism Case Studies in the United States" published by *The international Ecotourism Society* in 2000. This section describes what regions in Australia, Canada, and the U.S. have tried to initiate in terms of ecotourism development, how the regions with strong ecotourism businesses have capitalized their local economic and ecological resources, as well as what programs, policies, arrangements contributed to their development.

Queensland's Ecotourism Plan

Queensland, Australia provides one of the most popular destinations in which ecotourism activities can be enjoyed due to its rich biodiversity and the province's strong support for its ecotourism industry.

Tourism Queensland and the Queensland government divided the Queensland protected areas into eighteen ecological regions. These eighteen different regions have a number of unique natural and cultural attributes, all of which are unique environments and a very important element of ecotourism. Such abundant recreational and educational tourism opportunities are essential components of ecotourism development.

Along with these rich natural and cultural resources, the collaboration of stakeholders has enhanced the success of promoting the ecotourism industry. The ten major stakeholders of ecotourism in Queensland played key roles in growing ecotourism as a profitable industry: tourism industry, ecotourism industry, visitors, local and provincial

government, nature area managers, conservation groups, indigenous peoples, outdoor recreation groups, and educational/research institutions. The provincial government has played a leading role by creating "Growing Tourism initiatives," the "Master Plan for Queensland's park system," the "State Infrastructure Plan," "Queens Cruise Shipping Plan." Furthermore, all of the stakeholders have utilized these outcomes and information provided by Tourism Queensland, and this makes all of the stakeholders are working in a same manner.

Ontario's Resource-Based Recreation Tourism

Ontario has developed a mature resource-based recreation tourism industry. Historically it has generated hundreds of millions of dollars annually from fishing and hunting, according to the 2002 Ontario Resource-Based Tourism Diversification Opportunities Report. [19] A number of tour operators have also tried to broaden their activities with nature-based and ecotourism products.

The Canadian government initiated a $6.3 million Resource-Based Tourism Diversification Program in October of 2000. This study sought to enhance the rural Ontario economy by 1) conducting a SWOT (strengths, weaknesses, opportunities, and threats) analysis of resource-based tourism in Ontario, 2) assessing market demand, 3) identifying the current state of market products, 4) developing business strategies to take advantages of new opportunities, and 5) developing new product development strategies.

Ontario's major resource-based tourism activity is fishing. Hunting and hiking including trekking and walking tours are the next most popular activities. Unlike Michigan, boating, paddling (canoeing/kayaking/rafting) and winter activities (snowshoeing and XC skiing) were not major tourism activities at the time of the study. Ontario expects to attract new U.S. customers to participate in non-consumptive types of outdoor recreation.

The Ontario resource-based tourism study identified four new tourist product categories with diversification opportunities: 1) nature appreciation, 2) water, land and air adventure, 3) cultural experiences, and 4) winter experiences. 'Wildlife observation' and 'bird watching' provide major tour products opportunities for nature appreciation. 'Biking tours', 'walking/hiking/trekking packages,' 'canoeing and kayaking instruction/guided excursions,' 'tour boat cruises of lakes and rivers,' provide product opportunities for outdoor adventures. In the cultural experiences, the tour packages encompass national cultural heritages, forestry and mining heritages, and arts and crafts workshops. 'Snowmobiles safari tours,' 'lodge to lodge cross country ski expenditures,' and 'winter gateway packages' provide winter experience opportunities. Ontario planners expect these tour packages to attract more U.S. and local tourists.

The Ontario analysis identified business opportunities for Ontario resource-based tourism operators. Since Ontario's natural resource features and climate are similar to those of Northern Michigan, Ontario's resource-based tourism planning may be relevant to Northeast Michigan. Ontario survey data show they have significant numbers of tour operators willing to consider business changes to take advantage of new markets and new types of customers. As the Ontario survey was conducted in 2002 when economic conditions were better, the willingness of tourism businesses to change may be less in the current economic downturn.

Successful Regional and State Ecotourism Initiatives in the U.S.

Other examples of ecotourism related development planning in other U.S. regions: DESTINY 2000 in Maine, Virginia EcoTourism Association in Virginia, and Green Forever in Oregon.[20] In the following, we briefly described their ecotourism plans.

DESTINY 2000 in Down East Maine provides an example of regional ecotourism planning. The Down East Resource Conservation and Development Council (RC&D) formed the Vacationland Resource Committee (VRC) in 1994 to respond to the increased demand for tourism in the Down East Maine region and created the DESTINY 2000 plan. This sustainable tourism plan aims to preserve natural resources and promote jobs. From its formation in 1994 to the release of DESTINY 2000 plan in 1999, the VRC organized four conferences and a fifth conference after public release of the plan. Over 50 volunteer organizations participated in each conference and formally committed to implement the plan. Several new partnerships were established to implement the plan. In 2004, VRC revised and updated the plan for DESTINY 2010, to refine implementation strategies. (The DESTIBY 2000 document can be found at "http://www.downeastrcd.com/")

The Virginia Ecotourism Association provides an example of creating an ecotourism association. The Virginia Beach Department of Conventions and Visitors Bureau organized a process to discuss the potential for ecotourism in Virginia that included the creation of a strategic plan. A strategic plan for ecotourism was developed that included topic areas like education, facilities, finance, legal issues, marketing, and regional participation. A pilot curriculum for a Coastal Virginia Ecotour Guide Certification program was created that was funded by the state Department of Environment Quality. Ecotour Guide Certification workshops address 1) the role of ecotourism, 2) the natural limits of sensitive resources and needs for a cooperative approach to ecotourism assets, and 3) understanding the natural history of coastal Virginia. The Virginia EcoTourism Association was established in 1998 to develop ecotourism practices and projects.

Oregon's Ecotourist's Guide provides an example of an ecotourism marketing strategy. One of the challenges in the ecotourism industry is the lack of public/consumer awareness. The Lost Valley Educational Center in Lane County, Oregon created Forever Green, a 48-page ecotourist's guide to the area. The guide describes tourist destinations, like "state parks" and "museums."

In reviewing these three cases of ecotourism development strategies, it is clear that the developing a regional ecotourism industry requires strategic planning and engaging a broad range of organizations. In two cases, symposiums and conferences were important in building partnerships between businesses, local communities, and local and state agencies. Strong partnerships and effective networks provided the means to implement strategies to develop ecotourism business.

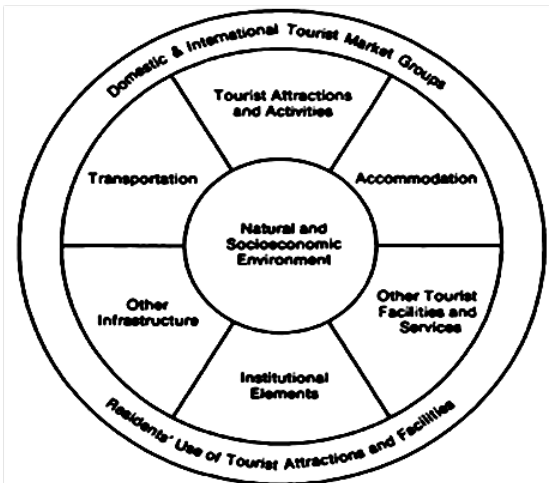## 4. Recent Northeast Michigan Ecotourism Initiatives

Figure 2. Edward Inskeep's components of tourism plan

In Michigan, there is no independent organization dedicated to ecotourism promotion and marketing. As the examples above suggest, the importance of strong organizational leadership and the importance of planning contribute to the growth and development of the ecotourism industry. Since tourism sectors activities are affected by the region's natural/cultural resource, transportation, infrastructure, and land use planning, tourism planning is a key part of regional economic development planning process. According to Edward Inskeep, a World Tourism Organization (WTO) planner, within tourist markets (domestic, international, and residents) and tourism environment, all the transportation facilities, tourist attractions/activities, accommodation facilities, and other tourist facilities, including travel operations, tourist information, restaurants, and shopping, should be considered in the planning process with cities' infrastructure and institutional programs (See Figure 2). This indicates that tourism planning is a "multi-sectoral activity." Multiple sectors related to ecotourism should be incorporated into regional planning informed by a comprehensive knowledge of natural regional resources.

In Northeast Michigan, Michigan Sea Grant and Northeast Michigan Council of Government took the first important steps in a comprehensive regional ecotourism planning process. They recently completed a Northeast Michigan Integrated Assessment (NEMIA)[21] that provides an assessment of the capacity of three counties (Presque Isle, Alpena, and Alcona) in Northeast Michigan to develop sustainable tourism and maintain the region's natural and cultural resources. The Sea Grant assessment was conducted through five sectors: socioeconomic, ecological, cultural, planning and zoning, and sustainable design assessment.

In the report, the Michigan Sea Grant and the National Oceanic and Atmospheric Administration (NOAA) examined the Thunder Bay National Marine Sanctuary dealt with a cultural assessment to identify coastal cultural assets of Northeast Michigan. The results of the assessment include the following two assets: on-shore and in-water assets. As potential ecotourism attractions, approximately 71 known shipwrecks were identified in Lake Huron waters, and 100 unknown wrecks could be found in those areas. These can provide tourists culturally and naturally rich enough experiences on diving and snorkeling activities, and also bring economic benefits to the region's communities.

In addition, NEMIA identified the three counties' natural features including the protected land, the concentration of rare ecosystem, plants and animal in the region, and rank the Ecological Importance in the ecological assessment section. As a part of results, NEMIA also suggested potential ecotourism activities examining the regions' geological features and migratory bird sites. The results suggest that Thunder Bay area and Black River area can host bird watching sites. Also, there are concentrations of protected land in Huron National Forest, Thunder Bay River State Forest, and Atlanta State Forest Area. These assets identified in NEMIA report could be the basis of ecotourism in the region.

III. Methodology

The project team conducted a survey of business and potential consumers of ecotourism in 2010. This section explains a geographic scope of developing a contact list of potential ecotourism companies and the process of developing a survey instrument.

1. Geographic Scope and Survey Questions

The geographic scope of the survey includes the eight NEMCOG counties: Alcona, Alpena, Cheboygan, Crawford, Montmorency, Oscoda, Otsego, Presque Isle. If the companies were directly related to ecotourism, the other regions were included even though the companies are not in Northeast Michigan. On August 24 2009, MSU CCED project team members had a conference call with NEMCOG and Michigan Sea Grant. The purpose of the conference call was to discuss the company list and contents of the survey instrument. From this conversation, major potential ecotourism companies were added to the contact list from their recommendations. Among them, eight companies directly related to tourism were located outside of Northeast Michigan (but still in the state of Michigan). (Please see the Appendix A for the company contact list.)

The company list was organized based on identified recreation sport activities. The project team used the Google search engine and Michigan Travel Bureau to identify potential ecotourism companies. In the Google search engine, we first typed tour activities (e.g. boating/camping, etc.) in the section of 'Maps,' visited shown websites in the regions of NE MI, and compiled the companies' mailing addresses, website addresses, phone and fax numbers, and email addresses. In the Michigan Travel Bureau, we used the data sources under the section 'Outdoors At & Near Your Destination.' In this section, the tour activities are already categorized by the organization, and each activity section provides company lists. We visited identified websites in Northeast Michigan, and compiled the companies' addresses, website addresses, phone and fax numbers, and email addresses. As a result of this process of developing contact list, 121 companies were finally identified to contact to participate in the ecotourism survey.

The survey instrument was developed in consultation with NEMCOG and Michigan Sea Grant staff to refine questions about company activities, needs, and barriers. As described above, assistance was also provided on information for identifying tourism companies at the same time. Elements and questions of the questionnaire are organized in Table 4. The questionnaire is divided into four main sections. The survey intended to identify the companies' tourism products, their self-identification of ecotourism and resource-based recreation, and their needs and barriers in operating their businesses.

Table 4: Survey questionnaire elements

Element/Section	Question
Introduction	• Overview/purpose of the survey • Contact information
Specific characteristics of company	• Types of services • Types of activities • Types of natural resources • Operation season(s)
Self-identification/Three elements of ecotourism	• Self-identification of ecotourism / resource-based recreation business • Three elements of ecotourism -natural area, education objectives, and sustainability goals
Company needs and barriers	• Limitations or restrictions faced by operating companies • Assistance or support needed by operating companies

2. Use of Multiple Methods to Obtain Survey Responses

The project team collected data using first-class mail, phone, and e-mails that included a link to the online survey.

The questionnaire was piloted with eight companies on October 29th, 2009. We sent out the questionnaire to 8 companies, and received 2 questionnaires. Since all of the answers were clear to understand and, the respondents elaborated their concerns in the questionnaire, we used the same questions and formats for the survey.

At the same time, we created the online survey system. After general distribution of the survey questionnaire to 121 companies, project team members contacted each company by phone to determine whether its questionnaire had been completed or if the company wanted to provide their responses by phone or online. Only one company responded by phone. 36 companies sent back their responses by mails while 7 companies provided their responses by online survey. Please see the Appendix B. for the details of survey method and timelines.

IV. Ecotourism Survey Data and Findings

1. Survey Response Rate

Of 121 companies initially identified to participate in our ecotourism survey, information was insufficient to contact 12 companies. Of the remaining 109 companies, 43 completed questionnaires for a response rate of 39.4%.

Ecotourism Survey Response Rate

Pie chart:
- Did not participate 47%
- Completed 39%
- Rejected 14%

Legend: Did not participate | Completed | Rejected
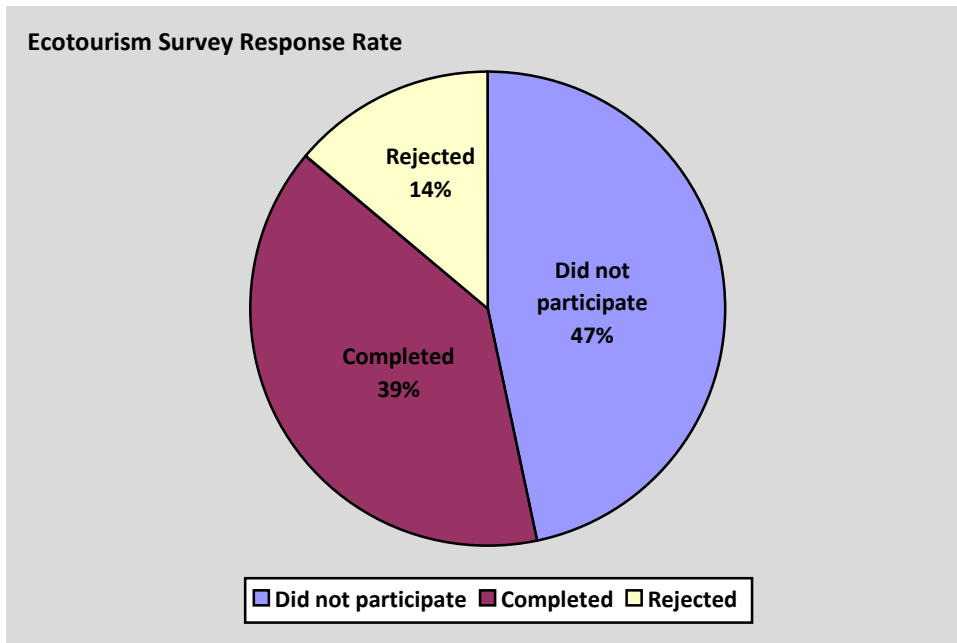
Figure 3. Survey contact results

2. Survey Data and Findings

The two co-learning objectives on the team included the identification of ecotourism businesses in Northeast Michigan and identification of their needs. These objectives were achieved by conducting a mail/phone/web-based survey that generated data provided by 43 companies. Preliminary findings are described in this section, including quantifying the extent of ecotourism companies and identifying the types of services/activities/natural resources provided by these companies. We also identified their needs and barriers to operating their businesses.

1) Quantifying the extent of ecotourism companies and identifying their characteristics

Ecotourism, resource-based recreation, and ecotourism/resource-based recreation companies were both self-identified and objectively identified. For the latter, three objective criteria or levels were used to screen questionnaire responses. These three levels include 1) travel to a natural area, 2) education objectives, and 3) sustainability

goals. In order to assess the development of the ecotourism sector in Northeast Michigan, the number and sizes of ecotourism companies were quantified. Data on customers' interests in environmental information and the companies' needs for information were also obtained.

a) Ecotourism companies

In the survey, 21 (50.0%) companies self-identified as ecotourism businesses and 33 (78.6%) self-identified as resource-based recreation businesses. Among the 21 self-identified ecotourism companies, 20 companies also consider themselves as resource-based recreation businesses.

Table 5: Companies' self-identification of ecotourism and/or resource-based recreation business

Companies Self-Identification		The number of companies
Ecotourism businesses	Yes	21
	No	10
	Not sure	11
resource-based recreation business	Yes	33
	No	1
	Not sure	8

As seen in Figure 3, 20 ecotourism companies have been identified by the five screening questions in the questionnaire related to three ecotourism elements: natural location, education, and sustainability. We eliminated companies that were not operated by using natural resources (located in natural areas). From the entire group of 43 respondents, 39 companies filtered through the natural resource question. As a second step, we used two education questions to eliminate non-ecotourism companies: the questions were whether they offered education to their tourists by means of providing either tour guides or educational materials. After this second step, 22 companies met the criteria. The last step was to eliminate the companies seek to the protection of sensitive environmental areas or whether companies provide leadership in natural resource protection. Based on three criteria, 20 businesses were identified as potential ecotourism companies.
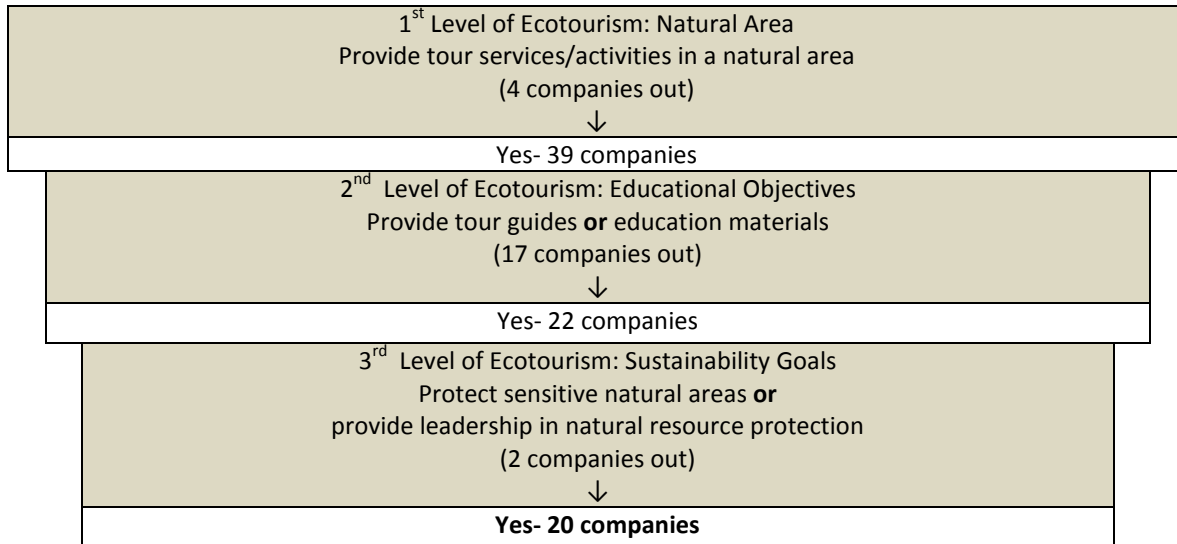
1st Level of Ecotourism: Natural Area
Provide tour services/activities in a natural area
(4 companies out)
↓
Yes- 39 companies

2nd Level of Ecotourism: Educational Objectives
Provide tour guides **or** education materials
(17 companies out)
↓
Yes- 22 companies

3rd Level of Ecotourism: Sustainability Goals
Protect sensitive natural areas **or**
provide leadership in natural resource protection
(2 companies out)
↓
Yes- 20 companies

Figure 4.Three ecotourism components and the number of ecotourism companies

One of the challenges in the ecotourism industry is that many tourism businesses mislabel themselves as ecotourist businesses mainly due to a lack of awareness about the element that are critical to ecotourism. However, in the case of Northeast Michigan, the survey results show little misuse of the term "ecotourism." Only one company out of twenty-one self-identified as an ecotourism company, but this company did not meet ecotourism criteria.

Among 20 companies identified as ecotourism businesses, five companies are not in Northeast Michigan. Among the five companies in other regions in Michigan, two companies have ecotourism banners for their businesses (one is located in the Upper Peninsula, and the other is located in Davison).

b) Specific characteristics of ecotourism

This section reports the data findings of the services, activities, and natural resources that ecotourism companies provide and utilize.

The size of the identified ecotourism companies is relatively smaller than non-ecotourism companies. The number of employees in ecotourism businesses ranges from 1 to 23 with an average of 5.2 employees while non-ecotourism companies have 1 to 300 employee ranges with an average of 24.32 employees.

Of the twenty selected ecotourism companies, nine (45.0%) provide tours and nine (45.0%) provide watercraft sales/rental services. Not surprisingly, about half of the ecotourism companies provide tour services, and those that provide them often offer on-site guides and lodging, and equipment/ provision services together. (See Table 6)

Table 6: Ecotourism Business Services

Services	Ecotourism Businesses (20)	
	Number	Percentage
Tours	9	45%
Lodging	6	30%
On-site Guides	7	35%
Equipment/Provisions	8	40%
Watercraft sales/rentals	9	45%
Other*	5	25%

*Other: Boat, fishing charter, hunting/fishing, snow/ATV retails

Table 7 shows that fishing is the most frequent activity in the ecotourism business; 11 companies (55.0%) provide fishing as an activity. Kayaking is the second most frequent sited ecotourism activity; 9 companies (45.0%) provide kayaking. Among non-ecotourism businesses, boating and canoeing are the major activities; 9 companies (39.1%) provide boating or canoeing activities. Other activities that ecotourism companies provide were excursions, soft adventures, such as waterskiing and tubing, and mini golf.

While horseback riding and downhill skiing may be ecotourist activities, they were not referenced by ecotourism companies in this study. On the other hand, underwater diving, which could also be an ecotourist activity, was not offered as a tour activity among non-ecotourism companies. In sum, fishing, kayaking, and boating are the major ecotourism activities, and they all utilize water resources.

Table 7: Ecotourism Business Activities

Activities	Ecotourism Businesses (20)	
	Number	Percentage
Fishing	11	55%
Kayaking	9	45%
Boating	8	40%
Canoeing	7	35%
Bird Watching	7	35%
Wildlife Observation	6	30%
Fly-Fishing	6	30%
Hunting	6	30%
Hiking	5	25%
Snowshoeing	5	25%
XC-Skiing	4	20%
Other	4	20%
Rustic Camping	3	15%
Rafting	3	15%
Underwater Diving	3	15%
Snowmobiling	3	15%
Biking	2	10%
RV-Camping	1	5%
Horseback Riding	0	0%
Downhill Skiing	0	0%

One interesting observation is that snowmobiling was categorized as an ecotourism activity; three companies that offer snowmobiling were self-identified as ecotourism companies. This result can be explained by a closer look at the companies' other services and activities they provide. Among the three companies, two are operated as resorts and one is a "fishing and hunting" shop, and the snowmobiling is one of the various activities they offer for their customers.

Regarding natural resources, about half of all respondents utilize Michigan's extensive water resources. Over the half of ecotourism companies utilize rivers/streams (60.0%) and inland lakes/wetlands (50.0%) for their services. Using these natural resources, the companies provide their services in specific geographic areas. The major geographic areas where ecotourist services and activities are provided by companies include Lake Huron, Au Sable River, Fletcher Pond, Thunder Bay River, Huron National Forest, Sturgeon River, and Pigeon River.

Table 8: Types of natural resources used by ecotourism businesses

Natural Resources	Ecotourism Businesses (20)	
	Number	Percentage
Lake Huron waters	9	45%
Lake Huron Coast	7	35%
Inland lakes and wetlands	10	50%
Rivers and streams	12	60%
Unique natural landscapes	5	25%
Forests	9	45%
Other*	2	10%

*Other: Lake MI/Lake Erie, Manistique Lakes

In the specific geographic area questions, the major geographic areas, where ecotourist services and activities are provided by companies, include Lake Huron, Au Sable River, Fletcher Pond, Thunder Bay River, Huron National Forest, Sturgeon River, and Pigeon River. Table 9 shows all the geographic areas and the types of services/activities provided by ecotourism companies.

Table 9: Geographic areas where ecotourism services/activities are provided

Geographic areas	Activities/Services
Lake Huron	Boating, fishing, excursion, off shore fishing, underwater diving
Au Sable River	Canoeing, kayaking, rafting, fishing, fly-fishing, tubing
Fletcher Pond	RV/Rustic Camping, hunting, fishing, boating, snowmobiling, wildlife observation, bird watching
Thunder Bay River	Boating, canoeing, kayaking, fishing, fly-fishing
Huron National Forest	Hiking, hunting, wildlife observation, bird watching, Drift boat fishing
Sturgeon River and Pigeon River	Canoeing, kayaking, rafting, tubing
Wildwood Hills Pathway, Seven springs Nature Preserve, Burt Lake State Park	XC-skiing, snowshoeing, mini-golf
Manistique Lakes	Boat/ATV/Snowmobile rental use, fly-fishing
Shiawassee National Wildlife Refuge	Boating
Cooke Pond	Boating

Au Sable River and Lake Huron seem to be the major geographic areas ecotourism businesses. These areas can provide high-quality experiences to tourists. The activities that these areas provide are mainly related to paddling activities such as boating, canoeing, kayaking, and sometimes underwater diving. Companies are also utilizing land-based natural resources located in Huron National Forest and Burt Lake State Park for providing land-based ecotourism activities such as camping, hiking, hunting, wildlife observation, bird watching, XC-skiing, and snowmobiling. Certain activities, such as wildlife observation and bird watching are provided at Fletcher Pond, Huron National Forest, Black Lake, and Paradise Lake, and these emphasized the biodiversity of the region.

As described, the majority of natural resources utilized by ecotourism companies are concentrated on water resources, and the activities provided by them are based on water activities. Consequently, ecotourism companies primarily operate their businesses in summer. 4 ecotourism companies operate their businesses in late spring, summer, and early fall. (See Table 10)

Table 10: Operating seasons of ecotourism businesses

Seasons	Ecotourism Business (20)	
	Number	Percentage
All seasons	9	45%
Spring	7	35%
Summer	10	50%
Fall	7	35%
Winter	1	5%

2) The needs and barriers of ecotourism businesses

Based on the companies' responses to open-ended questions regarding their needs and barriers in operating their businesses, we could describe limitations or restrictions that they face in operating their companies and assistance or support that they need. Also, their general concerns and issues were identified.

Over 80% of ecotourism companies believe that tourism/ ecotourism/ resource-based recreation tourism in Northeast Michigan benefits their companies. (See Table 11)

Table 11: Northeast Michigan tourism/ecotourism/resource-based recreation business

	Do you believe tourism in Northeast Michigan benefits your company?		Do you believe ecotourism or resource-based tourism in Northeast Michigan benefits your company?		Would greater promotion of ecotourism or resource-based tourism in Northeast Michigan benefit your company?	
	Number	Percentage	Number	Percentage	Number	Percentage
Yes	18	90.0%	17	85.0%	16	84.2%
No	0	0.0%	0	0.0%	0	0.0%
Don't know/ Uncertain	2	10.0%	3	15.0%	3	15.8%
Total	20	100.0%	20	100.0%	19*	100.0%

*: Missing one response

In the question of information needed by companies, 8 (40.0%) of the ecotourism companies are most interested in the information about resource-based recreation/ecotourism company promotional and marketing assistance. The second item that ecotourism companies are interested in is the information about ecological operation and specific natural resource management. (See Table 12)

Table 12: Information needed by ecotourism and non-ecotourism companies

	Ecotourism Businesses (20)	
	Number	Percentage
Resource-based recreation/ecotourism company promotional and marketing assistance	8	40%
Operating resource-based recreation/ecotourism companies in ecologically-sound ways	3	15%
Specific natural resource management or ecological issues or other:*	3	15%
Impact of global climate change on Michigan natural resources	2	10%
Other	1	10%

* Control/elimination of invasive species/ cleaning up waters.

Also, the companies provided information about their customers' interests on environment. Thirteen ecotourism companies (65.0%) are not sure that their customers would be interested in information about environmental issues. Four ecotourism companies (20.0%) think that their customers would be interested in those issues.

Table 13: Customer interests in environmental information

	Ecotourism Businesses (20)	
	Number	Percentage
Yes	4	20%
No	3	15%
Not sure	13	65%
Total	20	100%

One of issues in ecotourism could be the potential effects of global climate change, and we asked the companies opinions on the impact of global climate change on their businesses. Eight ecotourism businesses (42.1%) do not expect that global climate change will harm natural resources and their businesses within the next 5-10 years.

Regarding the issues of training tour guides, 8 ecotourism businesses (42.1%) do not train their tour guides. The primary reasons are that they hire professional tour guides who are already knowledgeable in their fields, and that the size of their companies are small which means that the owner of the company informs their customers about what to do and where to go. Two companies would like to offer guide services relating hunting and fishing, but the companies cannot afford to offer the service due to what they believe are high Michigan licensing costs for hunting and fishing. They reported that it costs too much to have guide licenses for hunting and fishing. This relates to the companies' restrictions/limitations that they face in operating their companies.

Table 14: Training of tour guides in ecotourism businesses

Training of tour guide	Ecotourism Businesses (19)	
	Number	Percentage
Yes	5	26.3%
No	8	42.1%
Not applicable	6	31.6%
Total	19	100%

Nine ecotourism companies (45.0%) do not produce educational materials while 8 ecotourism companies (45.0%) produce their own educational materials. 16 ecotourism companies (80.0%) use educational material produced by the Michigan Department of Natural Resources. The second institution for ecotourism companies' educational material sources is the U.S Forest Service. We asked participants to describe organizations if they checked 'Environmental Organizations' or 'Other.' Environmental organizations that the companies use as a source for educational materials include Trout Unlimited, which is an organization conserving and protecting Michigan's coldwater fisheries and their watersheds. Others include American Canoe Association, MI Paddle-sport Provider Association, Anglers of the Au Sable, Canoe Association, and NOAA.

Table 15: Use of educational materials

Use of Educational Materials	Ecotourism Businesses (20)	
	Number	Percentage
U.S Forest Service	7	35%
MI DNR	16	80%
MI DEQ	3	15%
U.S. Park Service	2	10%
MSU Extension	4	20%
Environmental Organization	6	30%
Other	6	30%

Finally, we asked companies four types of restrictions/limitations they face and assistance and support they need: regulatory, economic, social, and web-related or other. Ecotourism companies deal with regulatory restrictions/ limitations mainly about their difficulties in paying taxes, fees, and insurance, some of which are regulated by the state/federal government. For example, they mentioned that business taxes on small businesses, boat registration fees, fishing and hunting license fees, liability insurance for a seasonal business are the restrictions that they face in operating their businesses. Ecotourism companies' economic restrictions are heavily related to the lack of revenue from fewer tourists, which may in part be caused by Michigan's recent economic downturn. They are having a hard time because of fewer customers, and some of them have more customers from Ohio and Indiana, not from Michigan. Also, they have difficulties in operating their businesses because their expenses (fees, leases, insurance, payroll, taxes, etc) are increasing more than their revenue.

They also cite having a lack of a good relationship with the local government, neighbors, and the region. They believe that the communities' perceptions of those kinds of companies are negative; the neighbors think that the companies utilize communities' natural resource. They expressed the support of internet-based advertisement. They consider the web marketing is the best way to promote their businesses. (See Table 16 for a summary of responses)

Table 16: Summary of Restriction/Limitations and Assistance/Support

Restrictions/limitations faced by ecotourism companies	Assistance/support needed by ecotourism companies
Regulatory: • Fish and game laws • Tax compliance/ local regulation (boat inspections); takes months to get a response. • Regulation and paper work. Zoning in Cheboygan County - unfair and costly. • Boat registration fees; fishing and hunting licenses; liability insurance; guide licenses fees. • Water flow regulated by Consumers Energy on the lower Au Sable River. • Water navigation restrictions. • Very expensive liability insurance for a small, seasonal business. DNR and Forest Service and Parks require proof of insurance. • DNR lease program. Business taxes on small businesses limiting number of businesses that are on river but not personal water crafts. • Paying unemployment for youthful workers who quit.	**Regulatory:** • Too much tax and inefficient tax compliance • Planning/zoning Commission land use regulations • Low interest loans for businesses • Heavy fines for unlicensed "guides" (guiding hunters and anglers) • Put people in charge that are sensible about the needs of business and get rid of the stupid fees, rules and laws that make no sense and needlessly impede businesses • A better working relationship with State and Federal agencies • Reduce fees for DNR+Parks. Once the demand becomes higher than introduce fees UP needs more visitors
Economic: • Need more tourists from Michigan / poor economy • All expenses increasing (fees, leases, insurance, payroll, taxes, etc.). • High cost to facilitate charters for fishing and boat docking. • State budget problems, MDNR funding cuts • Efficient ways of marketing. • Fees and extra insurances necessary for DNR for lease programs. Small businesses taxes in Michigan. • Compete with internet sellers (free shipping + no sales taxes).	**Economic:** • Need state to reduce taxes on small businesses. • Need state to decrease fees. • More/easier access to docks, less expensive docking for short-term charters. • Provide stimulating money to independent guides. • Grant or subsidy to grow businesses and promote state's assets. • Support for small loans or start up menus. • State of Michigan: collect sales tax on internet purchases. Tighten unemployment loop hole
Social: • Lack of conversation with local government • Poor relationship with neighbors, and their negative perception of companies' uses of river • Educating consumers about the resources available in the state of Michigan • Need to recruit more young people into the outdoor sports	**Social:** • Community's positive perception on the business • Education, starting in elementary schools Guidance on broadening that base • Marketing- Education on the value of such businesses and provide the ability to get them started
Web-related/other: • Great advertising source • Marketing • Pure Michigan promotions' positive impacts • Educating the consumers • Reputation of internet	**Web-related/other:** • More actions of Chamber and tourism Bureau for our communities • Enhanced the Pure Michigan presence in more states-Bird watching is difficult in the NE because most of the property is private. • Marketing

Table 17: General Concerns of Ecotourism Business

Summary of ecotourism companies' general concerns
• Government regulations and taxes.
• River quality/health.
• Invasive species.
• Ever-increasing fees, paperwork, and licenses (plus taxes).
• Financial issues with Rockport area property.
• Continued gas drilling and related pipelines & processing facilities and associated noise.
• State budget cuts and the effect on future fish planting programs and future research to solve current problems.
• Failure of federal agencies and courts to stop Asian carp from entering the Great Lakes.
• Water quality/pollution and climate change.
• Ability to maintain business.
• Growth of economy and marketing by state.
• Current economic issues - if unprofitable, business will close and move.

In sum, many of the companies that participated in this survey are concerned about their economic and regulatory environments. Other than these, the general concerns that might affect their future are, perhaps not surprisingly, about environmental protection. To illustrate, the number of customers is directly related to the river or lake quality: the healthier the water quality is, the more customers visit. In addition, some of the ecotourism companies are having problems maintaining their businesses mainly due to the economic and regulatory barriers, so they are considering closing their doors, and moving to other states if their profits are continue to fall.

V. Conclusion

Determining the exact number of ecotourism companies was challenging for two major reasons: one, the lack of a clear, or consensus, definition of ecotourism and the lack of a clearly differentiated ecotourism sector in Michigan or the Great Lakes region. Nevertheless, our collaborative research was designed to identify existing ecotourism companies, their needs, and the barriers to operating their businesses. Data generated by our survey is intended to provide a platform for making practical recommendations to NEMCOG and its stakeholders for the design and implementation of a regional ecotourism strategy.

1. Potential and Challenges of Ecotourism Development in NE Michigan

Our survey findings suggest both opportunities and challenges associated with the development of an ecotourism sector in Northeast Michigan. Most companies identified as ecotourism companies are providing environmental education to their customers and committed to achieving sustainability goals. Some are willing to change their business environment to grow their businesses. They believe that they face regulatory barriers and the lack adequate financial capacity to grow. Also, their businesses use and support protected areas.

Three geographic areas in Northeast Michigan for ecotourism level themselves to potential sites: Thunder Bay area three lakes in North Bay, and Au Sable River. Two of these areas are also suggested as potential ecotourism sites in Northeast Michigan Integrated Assessment, provided by NEMCOG and Michigan Sea Grant. Three sports, fishing, kayaking, and boating, were identified as the major ecotourism activities. This can be a good indicator for further ecotourism development using abundant water resources in Northeast Michigan, as these water-based activities are of highest interest to Michigan tourists. Furthermore, most ecotourism businesses are members of the region's environmental organizations/clubs and participate in the local government decision making process, such as USFS and MI DNR. This shows that those businesses are actors in some ways using the regions' natural environment.

However, there are also challenges in creating the ideal ecotourism industry in Northeast Michigan region. Ecotourism businesses face various kinds of barriers to provide their services and products, since the size of companies is generally small, and financial capacities to maintain and grow their businesses are low.

Another challenge appears to be the "community relations" aspect of ecotourism. Respondents indicated a lack of support from government and neighborhoods. Although companies reported that they have educated customers, and provided the best natural experiences with their products, three companies indicated they get negative responses from their neighbors. To illustrate this, their neighbors think that those companies use

"their" rivers and natural resources without identifiable benefits to the residents, and companies believe that those negative perceptions can be improved by education.

The last biggest challenge of ecotourism development would be the lack of stakeholders' unified participation and action. There is no leading organization for developing the ecotourism industry in Northeast Michigan. As shown in the case studies, ecotourism in Queensland, Australia represents a successful case of ecotourism development that resulted from consolidated efforts among the government, industry, and community. Queensland is one of the most popular places to enjoy ecotourism activities not only because of its abundant biodiversity, but also because many stakeholders took unified action for developing the ecotourism industry. In the late 1990s, key stakeholders in Queensland Ecotourism, which include government, industry and community groups, launched the 1997 Ecotourism Plan. Five years after the implementation of the initial plan, the key stakeholders became aware of how their goals of ecotourism had shifted from the 1997 plan, prompting them to update and reinforce the ecotourism development; the updated information can be seen in The Queensland Ecotourism Plan 2003-2008.   The original 1997 plan provided four steps to make a strong framework: planning, developing, managing, and marketing ecotourism in Queensland. The outcome of those two plans include research on ecotourism consumers, and the ecotourism industry, guidelines for the three stakeholder groups, more effective tourism system, ecotourism training workshop, and community involvement. These stakeholders have used these outcomes and information provided by Tourism Queensland, and this keeps all of the stakeholders following the same plan.

2. The Future Study of Ecotourism in Michigan

This study has focused on the supply side of the ecotourism industry. There are at least six stakeholders in this industry: state and local government (Northeast Michigan, and State of Michigan), Michigan Sea Grant, The Thunder Bay National Sanctuary, ecotourism businesses, tour agencies, neighbors and communities, consumers, and other environmental organizations. By understanding all of these stakeholders' interests in the ecotourism industry, the ideal conditions for the industry can be met. Further work might examine the relationship of these stakeholders, for example, what ecotourism consumers' desire from their ecotourism experiences are, which political barriers the government face in supporting the ecotourism industry and how communities or neighbors benefit from the ecotourism businesses.

VI. Recommendations

Based on our survey findings and relevant case studies, we make the following six recommendations in three program areas to support the emerging ecotourism industry in Northeast Michigan.

1. Develop ecotourism education/awareness programs

Education provides an avenue to establish positive and supportive relationships between ecotourism businesses and their communities. Public awareness of ecotourism opportunities based on accurate information can increase the number of local ecotourism customers and enhance understanding of this important emerging business sector. Specific recommendations include the following:

- Create an 'Ecotourism' page on each local community's official web site to inform web site visitors about ecotourism opportunities and businesses.

- Develop an ecotourism certificate program in cooperation with community colleges and/or the state Department of Natural Resources and Environment (DNRE) to distinguish authentic ecotourism businesses from non-ecotourism businesses.

Official web-sites, such as MDNRE, Pure Michigan, or Michigan Chamber of Commerce are the good places to inform people about ecotourism. Also, the state government can create an ecotourism certificate programs in collaboration with universities or other main stakeholders of ecotourism. In a previous case study, the DESTINY 2000 Plan held several ecotourism workshops, and it would be possible for Michigan to provide ecotourism certificates for those who participated in these kinds of ecotourism workshops. This might require a strong partnership among these organizations and might create ecotourism related jobs.

2. Create a strategic marketing program

Strategic marketing provides a critical tool to attract ecotourists and strengthen and build the emerging ecotourism sector. Internet-based marketing is a critical component of innovative, low-cost marketing campaigns. Specific recommendations include the following:

- Create an ecotourism business directory and encourage Michigan tourism related web-sites to use this directory.

- Conduct future surveys to understand the demands of ecotourists and create marketing strategies based on that survey data.

3. Develop incentive programs

Incentives can be an effective tool to strengthen and create new businesses and support the creation of new jobs. Specific recommendations include the following:

- Offer incentives to ecotourism businesses that obtain ecotourism certificates.

- Offer incentives to tourists who use certified ecotourism products or businesses.

These incentive programs have not been identified in the case studies. However, major concerns of ecotourism businesses were associated with restrictions in paying taxes/fees/insurance, and they needed state's support for grant or subsidy to maintain or grow their businesses. Therefore, it might be effective for Northeast Michigan to promote the certified ecotourism businesses by reducing their fees related to ecotourism activities, such as boat registration/inspection or fishing/hunting license fees.

These recommendations are made in the knowledge of Northeast Michigan's colorful spectrum of natural and cultural assets that may be underappreciated by many regional residents. These assets include the Great Lakes Maritime Heritage Museum and Thunder Bay National Sanctuary with over 200 shipwrecks that underwater divers can explore in Lake Huron waters. These National Oceanic and Atmospheric Administration (NOAA)-supported assets can contribute to Thunder Bay becoming an important ecotourist destination. MDNRE-based assets include Negwegon and Thompson's Harbor state parks that offer outdoor recreation experiences without the usual state park amenities. These parks appeal to those ecotourists who want their travel experiences "off-the-beaten track."

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Appendix A. Ecotourism Survey Questionnaire

SECTION 1. Specific characteristics of your company.

1. What types of services or products does your company provide to tourists? (check all that apply)
□ Tours   □ Lodging   □ On-site Guides   □ Equipment/Provisions
□ Watercraft sales/rentals   □ Other_____

2. What types of activities does your company provide to tourists? (check all that apply)
□ Hiking   □ Biking   □ RV-Camping   □ Rustic Camping   □ Hunting
□ Horseback Riding   □ Boating   □ Canoeing   □ Kayaking   □ Rafting
□ Underwater Diving   □ Fishing   □ Fly-Fishing   □ Downhill Skiing
□ XC-Skiing   □ Snowmobiling   □ Snowshoeing   □ Wildlife Observation
□ Bird Watching   □ Other _____

3. Which seasons of the year do you operate? (check all that apply)
   □ All Year   □ Spring   □ Summer   □ Fall   □ Winter

4. Which types of natural resources are used or served by your company? (check all that apply)
□ Lake Huron waters   □ Lake Huron Coast   □ Inland lakes and wetlands
□ Rivers and streams   □ Unique natural landscapes   □ Forests
□ Other_____

SECTION 2. Your company and resource-based recreation and ecotourism-related needs and issues.

1. Do you think of your company as an ecotourism business?
□ Yes   □ No   □ Not sure

2. Do you think of your company as a natural resource-based recreation business?
□ Yes   □ No   □ Not sure

3. Are your company's services/activities provided in a specific geographic area? If yes, please specify.
□ Yes   □ No
 (Example: Canoe- Au Sable River) _____

4. Do you believe tourism in Northeast Michigan benefits your company?
□ Yes   □ No   □ Don't know/Uncertain

5. Do you believe ecotourism or resource-based tourism in Northeast Michigan benefits your company?
□ Yes   □ No   □ Don't know/Uncertain

6. Would greater promotion of ecotourism or resource-based tourism in Northeast Michigan benefit your company?

□ Yes □ No □ Don't know/Uncertain

7. Does your company provide tour guides who talk about natural features or resource conservation?

□ Yes-natural features □ Yes-resource conservation □ No □ Don't know/Uncertain

8. Does your company train tour guides to provide this information?

□ Yes □ No □ Not applicable

9. If 'No' to #8, please describe how your tour guides learn this information.

_____

10. Does your company provide educational materials or information on ecology or conservation?

□ Yes □ No

11. Does your company produce its own educational materials?

□ Yes □ No □ Not applicable

12. Does your company use educational materials produced by (check all that apply):

□ US Forest Service
□ MI DNR(Department of Natural Resources)
□ MI DEQ (Department of Environmental Quality)
□ US Park Service
□ MSU Extension
□ Environmental organizations:_____
□ Other_____

13. Does your company encourage the protection of sensitive environmental areas in its tourist business activities? (e.g. appropriate behavior to avoid habitat damage, etc.)

□ Yes □ No □ Don't know

14. Does your company provide leadership in natural resource protection and conservation? (Such as attend planning meetings and participate in local management discussions, etc)

□ Yes □ No □ Not sure
    If yes, please describe?_____

15. Would your customers be interested in more information on important environmental issues (e.g., global climate change, rare species habitat)?

□ Yes □ No □ Not sure
    If yes, please describe?_____

16. Do you expect that global climate change will harm natural resources and your business within the next 5-10 years?

□ Yes □ No □ Not sure
    If yes, please describe?_____

17. Does your company need information about (check all that apply):
□ Operating resource-based recreation/ecotourism companies in ecologically-sound ways
□ Impact of global climate change on Michigan natural resources
□ Resource-based recreation/ecotourism company promotional and marketing assistance
□ Specific natural resource management or ecological issues (describe)_____
□ Other, please describe:_____

18. How many full-time employees do you have in season? _____ (no. of people)

19. How many full-time in-season employees are permanent local residents? _____ (no. of people

SECTION 3. The following questions are about your company's needs and barriers to effective company operations. Please describe.

1. What limitations/restrictions do you face in operating your company?

•Regulatory:
_____
•Economic:
_____
•Social:
_____
•Web-related or other:
_____

2. What types of assistance or support do you need to address the following areas in operating your company?

•Regulatory:
_____
•Economic:
_____
•Social:
_____
•Web-related or other:
_____

3. Please describe any concerns or issues you have that might affect the future operations of your company.
_____

Appendix B. Project Survey Process

Method	Action Date	Targeted Number of Companies
Preliminary Distribution by U.S. Mail	October 29, 2009	8 companies (pilot study)
General Distribution by U.S. Mail	November 12, 2009	113 companies
Targeted Follow-up (based on phone contacts) by U.S. Mail	November, 2009	20 companies that requested questionnaire be resent via US mail
Blanket follow-up to non-respondents by E-mail	December 3, 2009	29 out of 36 companies that team had not been able to contact by phone
Blanket follow-up to non-respondents by U.S. Mail	December 10, 2009	36 companies that team had not been able to contact
Final follow-up by E-mail	January 20, 2010	40 companies that had not responded (except companies that declined to participate)

Appendix C. Survey Contact List

Category	#	Name of Company	Phone Number	Email
Hiking & Biking	1	Sunrise Side Bicycle Tours	989-225-0850	infosunrisesidebicycletours@yahoo.com
	2	Wakeley Lake Foot Travel Area	989-826-3252 (fax: 989-826-6073)	.
Camping	3	Thunder Bay Golf Resort	800-729-9375	
	4	Camp Walden	231-625-2050 (Fax: 231-625-2600)	summer@campwaldenmi.com
	5	Jacks Landing Resort at Fletcher Pond	989-742-4370	jackslanding@gmail.com
	6	Waterways Campground	231-627-7066	
	7	The Bluff's Resort	231-625-8443	info@bluffsresort.com
	8	Alpine Snow Cabin	989-619-4477	ken@alpinesnowcabin.com
	9	Beaver Creek Resort	989-732-2459 (fax: 989-732-1145)	reservations@beavercreekresort.net
	10	Heart Lake Waterfront Cottages	989-732-5081	heartlakeresort@charter.net
	11	Gates AuSable Lodge	989-348-8462 (fax: 989-348-2541)	gator@gateslodge.com
	12	River Park Campground	989-348-9092 (fax: 989-348-1638)	riverpark@voyager.net
	13	Sno-Trac Camper Village	989-348-9494 (fax: 989-348-6098)	snotrac@snotrac.com
	14	Wyandotte Lodge Canoe & Outfitters, LLC	989-348-8354	WyandotteLodge@aol.com
	15	Fletcher's Landing Resort	989-916-6097	mail@fletcherslanding.com
	16	Jack's Landing Resort	989-742-4370	info@jackslanding.com
	17	Pine Grove Beach Resort	989-733-8319	info@pinegrovebeach.com
	18	Grand View Resort	231-436-8100 (Fax: 231-436-8200)	reservations@grandviewresort.com
	19	Feigel's Family Resort and Motel	906-586-3678	mamabear8177@sbcglobal.net
	20	Log Cabin Resort & Campground	906-586-9732 (fax: 906-586-6851)	uplogcabin@sbcglobal.net
	21	Sherman's Resort Cabins, Campground & Guide Service	906-586-6761	staboone@yahoo.com
	22	Campers Cove RV Park & Canoe Livery	989-356-3708 (fax: 989-354-6023)	camperscove@charterinternet.com
	23	The Indian River RV Resort & Campground	231-238-0035	ircgresort@msn.com
	24	Elkwood Campground	877-355-9663 (231-525-837)	.
	25	Toasty's Trail-Side Cabins	231-525-8101 (231-420-2507)	.
	26	Rollway Resort	989-728-3322	Information@RollwayResort.com

	27	Oakapiney Beach Cottages	734-665-8876 (989-471-2489)	oakapiney@aol.com
	28	Gorton House	989-786-2764 (fax: 989-786-9946)	
	29	The Landings	231-238-9955	c5x@straitsarea.com
	30	Silent Sports Lodge Bed & Breakfast	231-525-6166	
	31	Black River Ranch	989-733-8375	blackriver@wildblue.net
	32	John Smit	231-525-6166	
	33	NettieBay Lodge	989-734-4688 (fax: 989-734-8481)	info@nettiebay.com
Hunting	34	Valhalla Ranch	800-723-2445	keefer18@mac.com
	35	Renegade Ranch Hunt Club	231-627-2573, 734-464-9733	info@renegaderanch.org
	36	Gamebird Adventures Inc.	989-727-3569	
	37	Triple H Ranch	989-356-4069	norbh@hhhranch.com
	38	Keith's Hunting Fishing Camping & Supply Store	231-597-0333	
	39	Limberlost Farms, Inc.	989-785-4034 (fax:989-785-6304)	.
Horseback Riding	40	Liberty Valley Ranch	989-731-0149	ride@libertyvalleyranch.com
	41	Gaylord Equestrian Center	989-858-1882	reservations@gaylordequestriancenter.com
	42	Spruce Shadow Farms Riding Stable	989-727-2704	
Boating & Underwater Diving	43	Up North Charter	989-464-7241	
	44	Campers Cove RV Park & Canoe Livery	989-356-3708	camperscove@charterinternet.com
	45	Thunder bay scuba	989-356-6288 (fax:989-356-6404)	Info@TBScuba.com
	46	GREAT LAKES DIVERS, LLC	989-734-7590	steve@greatlakesdivers.com
	47	Sunriside Diving		
	48	Mariner's Village Marina	231-627-2200 (fax:231-597-9880)	mvm06@triton.net
	49	Walstrom Marine	231-627-7105 (fax: 231-627-8091)	cheboygan@walstrom.com
	50	Anchor In Marina	231-627-4620 (fax: 231-627-3677)	aimnm4@gmail.com
	51	Star Line Mackinac Island Ferry	231-436-5045	info@mackinawferry.com
	52	Burt Lake Marina	231-238-9315	info@burtlakemarina.com
	53	Indian River Marina	231-238-9373 (fax: 231-238-9372)	info@indianrivermarina.com
	54	Don's Sport and Marine	989-732-4157	
	55	Indigo Guide Service	231-898-4320	kevin@indigoguideservice.com

	56	Oscoda Canoe Rental	989-739-9040	
	57	Jim's Canoe Livery	989-348-3203	guilttrip25@hotmail.com
	58	PENROD'S Paddlesports Center	888-467-4837 (fax: 989-348-2910)	ContactUs@penrodscanoe.com
	59	Shel-Haven	989-348-2158	
	60	Carlisle Canoes L.L.C.	989-348-2301 (fax: 989-348-2301)	carlislecanoes@gtlakes.com
	61	Ray's Canoeing	989-348-5844 (fax: 989-348-7108)	flyfactory@troutbums.com
Canoeing & Kayaking & Rafting	62	Black River Canoe Outfitters	989-733-8054	
	63	Thunder Bay River Canoe & Kayak Livery	989-785-2187	office@thunderbaycanoeing.com
	64	Rainbow Resort Cabins & Canoes	989-826-3423	info@rainbowresortmio.com
	65	Gotts Landing	989-826-3411 (fax: 989-826-8116)	Canoe@GottsLanding.com
	66	Hinchman Acres Canoe Rental	989-826-3267 (fax: 989-826-2289)	info@hinchman.com
	67	Alcona Canoe Rental & Campground	989-735-2973 (800-526-7080)	.
	68	Parrotts Outpost	989-733-2472	info@parrottsoutpost.com
	69	Big Bear Adventures	231-238-8181 (fax:231-238-4500)	bigbear@racc2000.com
Fishing & Fly-Fishing	70	Buck's Bait & Tackle	989-595-2121	budd@bucksbait.com
	71	Clem's Live Bait & Tackle	989-354-2070	
	72	Currie's Long Lake Cottage	231-627-9109	jcurrie@nmo.net
	73	Wild Bills Bait and Tackle	989-742-4874	wildbillsbnt@yahoo.com
	74	Trout Scout V	989-657-2681	edreth@charter.net <edreth@charter.net>
	75	Middle Island Keepers' Lodge & Boat Tours	989-884-2722	jstuder@middleislandkeeperslodge.com
	76	Bay Sportfishing Charters/Guide Service	989-385-1311	captainryan@baysportfishing.net
	77	Bruning's Charters	989-734-3463	cbruning@george.lhi.net
	78	Gardner Charter Service	734-941-3982	gardnercharters@comcast.net
	79	Tight Loops Flyfishing	231-585-7131	tightloops@peoplepc.com
	80	Bridigare Charters	989-739-1342	DennyBid@yahoo.com
	81	Calypso Sportfishing Charters	989-739-2313	calypsocharters@yahoo.com
	82	Gail Force Charters	989-245-3585	gailforcecharter@usol.com
	83	Dobis Charter Service	989-724-9340	john@dobischarterservice.com
	84	Fish & Hunt Shop	906-586-9531 (fax: 906-586-3808)	Mickg@fishandhuntshop.com
	85	Northeast Bait & Tackle	- -	
	86	Goodnews River Lodge	800-274-8371 (fax:989-786-9946)	mikegorton@epicfishing.com

	87	J. C. Sportfishing Charters	740-627-7376	
	88	Plumbers Helper Charter	231-238-0576	
	89	Trophy Specialist Fishing Charters	734-475-9146	mikeveine@trophyspecialists.com
	90	Hawkins Outfitters	231-228-7135 (fax: 231-228-7137)	chuck@hawkinsflyfishing.com
	91	Jon's Guide Service	231-369-2997 (fax: 231-369-2997)	kestnerflyfishing@yahoo.com
	92	Bluebird Charters	989-820-4381	captron@bluebirdcharters.com
	93	Cool Runnings 2 Sportfishing Charters	989-529-4434	kent@speednetllc.com
	94	Wild Bills Bait and Tackle	989-742-4874	
	95	Buck's Bait & Tackle	989-595-2121	budd@bucksbait.com
	96	Wilderness Treasures	906-647-4002	support@theenchantedforest.net
	97	Terrys Bait & Tackle	989-734-4612	
	98	Cricket Charter Service	734-421-4293	jmrcricket@yahoo.com
	99	Grates Lodge Au Sable	989 348-8462 (fax:989 348-2541)	gator@gateslodge.com
	100	The Fly Factory	989-348-5844 (fax: 989-348-7108)	flyfactory@troutbums.com
	101	Alphorn Sport Shop	989-732-5616	
	102	Old AuSable Fly Shop	989-348-3330 (fax: 989-348-3331)	andy@oldausable.com
Skiing & Snow-shoeing	103	Cross Country Ski Inc	313-881-9999	
	104	Treetops Resort	989-732-6711	
	105	Alpine Snowmobile Rental	989- 731-1276	mhayesz@hotmail.com
	106	Extreme Power Sports	989-732-4331 (fax: 989-731-1226)	jdutcher@extremepower-sports.com
	107	Pro Source Rent/All	989-731-9988	
	108	Fun 'n' Sun Snowmobile Rentals	989-348-2188	snpb@freeway.com
	109	Woodland Snowmobile Rentals	989-348-9094	info@woodland-snowmobiles.com
	110	Bittersweet Ski Area	269-694-2032 (Fax: 269-694-6860)	.
	111	Forbush Corner Cross Country Skiing	989-348-5989	
	112	Rodgers Roost Bed & Breakfast	989-786-4850 (fax: 989-786-5177)	bettboop@freeway.net
	113	The Pines of Paradise	989-614-1179	inquiry@pinesofparadise.com
Ecotours (other region) & Others	114	Johnny Panther Quests Ecotours	810-653-3859	jpqcaptain@aol.com
	115	Woods & Water Ecotours	906-484-4157 (fax: 906-484-4158)	Info@WoodsWaterEcotours.com
	116	Wellington Farm Park	989-348-5187 (fax: 989-348-6324)	howard@i2k.net
	117	Tuttle Marsh Wildlife Area	989-739-0728 Fax:	.

		(989)739-0347	
118	Jordan Valley Outfitters	231-536-0006	info@jvoutfitters.com
119	East Jordan Chamber (Otter Water Tours)	231-536-7351 (Fax: 231-536-0966)	info@ejchamber.org
120	East Jordan Chamber (Eric and Carrie Myers)	231-536-7351 (Fax: 231-536-0966)	info@ejchamber.org
121	Nordic Sports	989-362-2001 (fax: 989-362-2001)	info@n-sport.com

[1] The Commission for Environmental Cooperation is an international organization and facilitates collaboration and public participation to foster conservation, protection and enhancement of the North American environment

[2] The International Ecotourism Society (2006). TIES Global Ecotourism Fact Sheet. Pg. 2.

[3] Ibid. Pg. 2.

[4] Stynes, Daniel J. and Sun, Ya-Yen (2003). Impacts of Visitor Spending on Local Economy: Pictured Rocks National Lakeshore, 2001. Department of Park, Recreation and Tourism Resources Michigan State University

[5] There have been a number of definitions of sustainability that many scholars and organization have worked on, and the concept of sustainability should be incorporated into three concepts: environmental protection, economic growth, and social equity. The definition of sustainability that contains all of the three realms could be "the need to ensure a better quality of life for all, now and into the future, in a just and equitable manner, whilst living within the limits of supporting ecosystems (Agyeman; 2002)."

[6] David B. Weaver and Laura J. Lawton. Overnight Ecotourist Market Segmentation in the Gold Coast Hinterland of Australia, *Journal of Travel Research*, Vol. 40, February 2002, 270-280

[7] http://www.planeta.com/ecotravel/weaving/hectorceballos.html. Interview with Hector Ceballos-Lascurain

[8] Ercan Sirakaya, Vinod Sasidharan, and Sevil Sönmez. Redefining Ecotourism: The Need for a Supply-Side View. Journal of Travel Research, Vol. 38, November 1999, 168

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[17] http://www.gdrc.org/uem/eco-tour/st-infosheets.html. Key ecotourism terms

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[19] Economic Growth Solutions, Inc. (2002). Ontario Resource-Based Tourism Diversification Opportunities Report. Ontario Ministry of Northern Development and Mines.

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