FORM A
AgBioResearch
RESEARCH PROJECT OUTLINE

_____ New Project: MICL0_________________

_____ x Revised Project: MICL02062

PROJECT TITLE: (Limited to 100 characters, including spaces and punctuation.)
Consumer Decision Making in Tourism and Outdoor Recreation: Working Toward Community Sustainability

DEPARTMENT AND PERSONNEL:

Department(s): CARRS, soon to be Dept of Community Sustainability

Principal Investigator: Christine A. Vogt

Cooperator(s):

Cooperating Agencies (not AgBioResearch): USDA Forest Service, North Central Research Station, Evanston IL

ORIGINAL START DATE: _____________ DATES OF REVISION: __4/1/13___________

PROBABLE DURATION: ___5 years___

Does this project involve animal health issues? _____YES _____x__NO If so, what percentage?

Does this project involve forestry-related issues? _x__YES _____NO If so, what percentage? 30%

________________________________________ (Signature - Principal Investigator)

RECOMMENDED: APPROVED:

________________________________________
(Department Chairperson) (Date) (AgBioResearch Associate Director) (Date)

________________________________________
(Department Chairperson) (Date) (CSRS) (Date)
1. **NATURE AND IMPORTANCE OF THE PROBLEM AND RELEVANCE TO THE MISSION OF AGBIORESEARCH:**

My scholarly work is focused on social sciences in a natural resource context. Most of my research is place or community based and aims to identify and assist government agencies, businesses and non-profits understand how to achieve improved ways toward sustaining natural resources, attracting or involving individuals, and achieving economic vitality. I particularly focus on individual or visitor decision making in travel, tourism an nature-based recreation, which has implications for product development and marketing communications. To be economically sustainable is to be profitable, equitable, and fair to future generations; to be socially sustainable is to be just, culturally sensitive, and enhancing quality of life; and to be environmentally sustainable is to be ecologically conscious and to provide leadership in understanding and integrating “green” into best management practices. My scholarship has and will continue to feature communities and regions in Michigan and in the Great Lakes basin or Midwest where natural resources and tourism and recreation economies have been interrelated for over a century. My research has been extended into other U.S. regions (including Southwest, Pacific Northwest, South) and international locations (including Canada, Singapore) with interesting social science and natural resource systems. The natural and place-based resources my work features are forested land, water and coastlines, brownfields, and parks and trails.

My research specifically relates to AgBioResearch’s mission statement of scholars engaging in innovative research that uses both science findings and practical applications that lead to economic prosperity, sustaining natural resources, and enhancing quality of life. My work best aligns with the AgBioResearch themes of: enhancing profitability, environmental stewardship, and community vitality. I consider myself to be a scientist that works with natural resource and social scientists. Moreover, I look for opportunities to work more closely with interdisciplinary teams of human ecology and natural science scientists. I have often collaborated with other AgBio researchers and MSU Extension educators, in addition to researchers at other top research universities and government agencies.

The research problem is to study consumer decision making, more specifically place-destination awareness, identity and choice; information search including a constantly changing web environment; and support of and behaviors that align with sustainability approaches.

The justification for research on consumer decision making is that travel, tourism and nature-based recreation products are consumed by almost everyone in Michigan, U.S. and world contexts. All three sectors, which are delivered by government, nonprofits and businesses, continue to grow in most domestic and international economies. More individuals are able to travel with greater household incomes and available leisure time; and communities, ranging from the largest cities to small urban towns, are developing infrastructure, services and programs that attract tourists and recreationists. Tourism and recreation is governed by the economic system of consumers’ demanding and communities’ supplying. Often this system is a hybrid of government, business and non-profit providers. The desire and need of communities of all types to create and invest in economies that provide jobs, improve quality of life, attract new residents, and improve the quality of the natural environment is the current challenge facing our society, governments and selected non-profits. Researchers have played an important role in demonstrating the contribution of tourism and recreation to these outcomes. Despite continued budget reductions, tourism and recreation as a field of study and as an industry have been resilient and continue to provide benefits to societies, economies, and the environment.

The size of the tourism and recreation industry is large in terms of number of consumers or users, money spent, time committed to the activity, and people employed; and recreation and some aspects of travel and
tourism can be found in virtually every community in Michigan and globally. Recreation scholarship at MSU has long had a strong natural resource focus and embraces stewardship, environmentalism, and conservation. Tourism is more about development and the consumption of community features and infrastructure and is growing in importance as a green, eco, sustainable, or new economy option for a diverse geographical scope from communities to countries. In Michigan, over $18 billion is spent by residents and out-of-state visitors which in turn supports over 200,000 jobs and thousands of small businesses. Understanding the impacts of natural resource recreation and tourism on the environment, the economy and society is crucial to the sustainability of these landscapes and natural systems, as well as community place-identity.

Over one-third of U.S. land is publicly owned and almost all of the land is legally mandated to manage resources for recreation opportunities. The other approximate two-thirds of U.S. land is private land and is also integrally linked to natural resources and recreation and tourism. Certain private land provides for housing and the attractiveness and value of housing may be directly tied to natural resources or the proximity to natural resources. Second homes and open space neighborhoods are examples of private land uses where natural resources add attractiveness and value. Beside land resources, water resources are also highly demanded by individuals for housing location and recreation; and water resources play an important role in economics, ecosystem services, and community identity.

Brownfields are becoming of great interest in both urban and rural redevelopment. Often through some type of a community planning process, remnants or overused natural resource that had been left aside with diminished value are being identified as a future open space or park. Community planners and park and recreation professionals are viewing these sites that may be former housing torn down (common in Midwest rust belt cities like Detroit and Cleveland), former military sites (like Joliet Arsenal now Midewin National Tallgrass Prairie outside of Chicago), former industrial corridors (like Calumet Illinois and Indiana), land fills (in most urban areas with large sites including Fresh Kills in NY), and former transportation lines (like rail-trails or elevated lines), as opportunities for redevelopment and the creation of new places for outdoor recreation and tourism. Often these sites contain contaminants and require specialized remediation lead by engineers. These redevelopment sites have involved biologists and ecologists to develop and implement conservation plans that aim to restore natural habitats. Sometimes the goal is to return the original species to the site, other goals may include mitigating urban sprawl by reusing a previously developed area in the geographic core of a community rather than the exurban edges. These redeveloped sites may become “re-attached” to the community as an attractive place to play, live and work, rather than an undesirable and often forbidden and unsafe place to visit. Repurposing of industrial sites into natural resource parks and places may be one of the prime examples of community sustainability and reuse.

The central focus of this AgBioResearch project is to continue to gain knowledge on and insight into tourists’ and outdoor recreationists’ decision making and information search behaviors in specified contexts: parks and conserved lands, communities as tourism destinations, blighted areas targeted for cleaning up and park development, housing near or within forests and natural resource amenities, and public infrastructure designed for non-motorized transportation (trails, safe routes to school). Specific applications to consumers’ uses of technology such as the Internet and onsite real time information messaging will be featured in most research projects developed in the next five years. The Internet has shown to be a major influence in consumers’ information search, decision making and purchasing for travel and recreation experiences. New knowledge of individuals’ and households’ behaviors in these natural resource and community sustainability contexts is of critical importance to effectively cope with the challenges and opportunities that are emerging in Michigan, the Great Lakes region and internationally.

2. PREVIOUS WORK AND PRESENT OUTLOOK:

In the past ten years of AgBioResearch funding, I have conducted dozens of empirical studies on tourism and outdoor recreation. I see the next five years for writing on topics that allow for comparative analysis of multiple sites and writing that features domestic and international case studies. On many topics, I currently
have primary data collected and on some topics up to ten years of longitudinal data. I also anticipate that I will have some newly funded projects in 2015 to 2017. Currently, I am more focused on past research that needs to be published, the Multistate Project, and an international sabbatical. The outlook for consumer research is that public awareness and use of, and support for natural resource sites, recreation activities, and tourism provisions is needed by agencies, businesses and nonprofits working on place-based or community development. There has also been a recent need for scientists like myself to join interdisciplinary teams that aim to study social psychology, economics, and other social behavioral sciences to assist in the work of natural sciences.

To facilitate multiple site research, I am a member (in 2012-13 I hold the chair position) of the Northeast Multistate Project titled “Outdoor Recreation, Parks and Other Green Environments: Understanding Human and Community Benefits and Mechanisms” (NIFA Multistate Research Project, NE1962). I specifically see my research aligning with one of the three areas of the multistate project; that is, community vibrancy and resiliency. Over the next five years, I plan to actively seek funding and collaborate with research teams to develop metrics, research proposals, and grants that substantiate and extend the evidence for the role of park, outdoor recreation, and tourism services in promoting community sustainability, vibrancy and resiliency. Both the document on file for NE1962, which I helped author, and the future research and publications from this work will help illustrate the national interest in the human connectivity to nature and the benefits generated from connections. The aim of the Multistate project is to collect, generate and present evidence that represents a broad US geography and demographics, and that has been assembled through collaborative science teams of university and agency researchers.

On the effort of domestic and international case studies in tourism, outdoor recreation and parks, I am planning a sabbatical to Singapore in 2014 where I will most likely work with researchers at Singapore’s National Parks Board. The topics thus far discussed as common interests include the social values of parks as a community gathering place and as a physical place where green infrastructure and ecosystems services are located. The use of technology in a park experience and the measurement of park and trail users and uses are additional areas of research and case study publications.

3. LITERATURE REVIEW:

When placed-based communities are originally settled, natural resources may be noticed for the first time by humans and subsequently consumed for survival. Next, early residents may find or create an opportunity to commodify and market natural resources to create a small but significant economy. As time passes, a community may change in population size or type depending on the quality and quantity of natural resources and the next use of those resources may be material extraction, goods manufacturing, transportation, housing, food and health provisions, public infrastructure, and leisure, outdoor recreation, or hospitality services, all roles that support economic outcomes and impacts. Some natural resources may remain public with management by public agencies or possibly as common pooled resources (Ostrom 1990), where other resources are sold or transferred to private interests for many of the aforementioned roles. Communities and their natural resources require constant attention in a changing world to ensure desired conditions and outcomes.

A community’s growth trajectory may change dependent upon unplanned events (e.g., natural disasters, economics, shift in demographics) or planned or anticipated events (e.g., policy change at any level of government, attracting businesses, master planning, community or resource management). Growth of a community or its ability to respond to change without negatively altering a desired growth pattern is at the heart of a community’s resiliency and ultimate survival and prosperity (Walker and Salt 2006). The 21st century has illuminated that many natural resources are not renewable and can easily be compromised, placing the health and vibrancy of a community in jeopardy. Community population and health, which are often dependent on economic conditions tied to natural resources, are highly dependent on a strong and growing economy and renewable or protected natural resources. Human existence, in a place or socially
organized community, must constantly adapt to the pressures of change stimulated by unplanned and planned events. Community visioning and planning that integrates sustainability concepts or coupled human and ecology systems may yield the best existence of healthy and vibrant communities.

Communities that recognize and plan for change are more likely to be resilient. Scientists and community outreach specialists, however, need to identify case studies that describe the substance of communities and model the processes by which change was managed (Bosselman, Peterson and McCarthy 1999). Following case study approaches, scientists need to arrive at a set of measures and indicators to study community characteristics with an eye on recreation and tourism systems as leading natural resource based economies in the urban-suburban-rural continuum of places. Finally, scientists who work from case studies and shared indicators can provide the necessary evidence to show that adaptation to change leads to more desired states like vibrancy and prosperity. Community changes in rural versus urban places showcase some of the demographic shifts and land use pressures that exist across the country.

An examination of U.S. rural counties with natural resources (Reeder and Brown 2005) shows areas that are dependent on recreation and tourism fared better than other rural counties on social-economic indicators. Reeder and Brown (2005) and others (e.g., Johnson and Stewart 2005, Kline 2001, Marcouiller, Lapping and Furuseth 2010, Stedman 2006, Stedman and Hammer 2006, Vogt 2010) attribute some rural population and economic growth to the presence of natural resources for recreation, tourism, and housing choices, particularly seasonal or vacation homes. Gateway communities or towns and cities in the wildland-urban interface enjoy many benefits attributed to the natural resources nearby. A growing retiree population and more professionals that work at home is piquing the interest of urban dwellers to live where the natural resources are plentiful and offer outdoor recreation activities and lifestyles (Vogt and Marans 2003, 2004). Some low performing or declining population rural communities are considering recreation amenity or tourism community models to change their trajectory.

A set of urban redevelopment projects is beginning to link some of the large-scale engineering efforts with public engagement and recreation planning. Through community change processes and formal planning exercises, remnants or overused natural resources may be left aside with diminished value. Community planners and park and recreation professionals are viewing these sites that may be former housing torn down, former military sites, former industrial corridors, land fills, and former transportation lines, as opportunities for redevelopment and the creation of new places for outdoor recreation and tourism. Johnson, Glover and Stewart (2009) studied a landfill-to-park redevelopment through the views of a nearby neighborhood. The research illustrates that community planning is necessary to create sense of place in an abandoned site that remains to be a threat to human health and quality of life. Moreover, the ownership of the landfill was public and a future park was also intended to be public, but private ownership was also considered in the mix of repurposing with concerns raised from residents. Klenosky, LeBlanc and Vogt (2008), along with Forest Service scientists and park managers, studied several option for repurposing brownfields in Midwestern and Eastern cities. The projects range from former military sites to industrial corridors to landfills. Social science research is adding value to the work by engineering and natural resource professions to transform an unsafe, unhealthy, and unproductive site into a public space featuring the resiliency of nature and humans’ desire to recreate in a variety of outdoor spaces. Rail corridors converted into bike and walking trails is another example of repurposing industrial landscapes, often found in the Midwestern and Eastern regions of the U.S., where rail lines were omnipresent infrastructure in an industrial economy. State-level departments of Transportation and Natural Resources negotiate with rail companies to purchase the corridor and then recreation planners transform the linear space into a park setting. Research has profiled the nature and level of use, as well as the importance of rail-trails to foster active transportation and physical exercise for residents and tourists of all ages (e.g., Peterson, Vogt and Nelson 2006).

Research is needed to document the full range of benefits that neighborhood parks and natural areas provide, both as catalysts of social diversity, cohesion and capital (DeGraaf and Jordan 2003, McDonough 2013, Westphal 2003). Research is also needed to clarify how residents understand and use
nearby neighborhood parks/green spaces and more distance or vacation settings that include parks and natural areas. Both types of research studies will help us understand the roles, benefits and costs of green spaces. Having a clearer understanding of local residents’ attitudes about these places will provide insights on public support and future funding for development and maintenance of open and green spaces, and the policies and park plans and management to create new parks and open spaces.

In summary, parks, natural areas, and other types of open spaces have the potential to create a sense of place that yields psychological and environmental stewardship benefits. Many studies have found positive associations between sense of place and pro-environmental behaviors (Halpenny 2010, Ryan 2005, Stedman 2002, Walker and Chapman 2003). Walker and Chapman (2003) suggested that pro-environmental behaviors can be encouraged by getting people engaged in activities that elevate sense of place and place attachment.

4. OBJECTIVES:

The overall goal for this AgBioResearch five year project is to generate relevant social science knowledge about current issues in tourism, outdoor recreation, and natural resource management and to participate as a scholar-practitioner in related actions and outcomes that involve tourism and outdoor recreation in sustainable community approaches.

Knowledge objectives include, to:

1. Evaluate levels of public awareness of outdoor recreation and tourism opportunities and participation rates and relate awareness and participation to personal health and community vibrancy outcomes.
2. Evaluate levels of public awareness and support of brownfield redevelopment for outdoor recreation and tourism.
3. Measure residents’ understanding of funding needs and the economic and tax contributions of outdoor recreation and tourism service delivery and infrastructure to a community or state’s economy.
4. Study innovative technologies such as smart phones and real time signboards in parks and community settings to evaluate how these technologies can be used to attract new or more park visitors/tourists and determine whether their use of the information improves or diminishes the quality of the visitors’ experiences.
5. Develop a social value framework to identify the social value of parks and urban greenery to Singapore residents. The inquiry will be framed around: social and place identification, social cohesion or integration, social functioning, social capital and assets, social leadership and social responsibility.

Action objectives include:

1. Increased participation rates in active outdoor recreation.
2. Improved infrastructure that supports healthy lifestyle choices, such as increased pedestrian trails and nonmotorized transportation options for school travel.
3. Recreation planning decisions made with user and nonuser demographic and behavior data.
4. Master or strategic plans incorporating tourism and outdoor recreation in sustainability agendas.
5. Greater coordination amongst tourism and recreation agencies.
6. More accurate forecasted recreation and visitor volumes and trends.

Outcome objectives include:

1. Improved human health conditions, including reduced levels of obesity, particularly among youth.
2. Improved social networks and community ties from increased contact with community members during outdoor recreation and travel.
3. Greater support for environmental policies, including increased parkland and nonmotorized transportation.
4. Inclusive and tailored recreation opportunities for a diverse public.
5. Greater attachment with the natural environment and a sense of place.
6. Sustainable and accessible outdoor recreation environments that lead to resilient communities and higher quality of life.
7. Outdoor recreation and tourism enterprises that contribute to communities’ economic stability.
8. Consumer technologies that enhance recreation and tourism experiences.
9. Greater scientific capacity to address contemporary problems by applying and revising state of the art knowledge.

5. RESEARCH METHODS/EXPERIMENTAL PROCEDURES:
A table format is used to show the research methods for selected research topics.

<table>
<thead>
<tr>
<th>Objective (knowledge only)</th>
<th>Community Outdoor Recreation and Tourism</th>
<th>Nonmotorized Transportation</th>
<th>Brownfield redevelopment</th>
<th>Urban National Parks</th>
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<td>#1, #2, #3</td>
<td>#4, #5</td>
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<tr>
<td>Methods used</td>
<td>Survey research</td>
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<td>Survey research</td>
<td>Observation techniques</td>
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<td>Experimental design</td>
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<tr>
<td>Time period</td>
<td>2013-2017</td>
<td>Ongoing data collection</td>
<td>Data collection occurred in Chicago area (Midewin, Calumet) in 2000’s and NYC area (Freshkills) in 2011-12.</td>
<td>2014 during sabbatical</td>
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<td>for Safe Routes to School</td>
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<td>year Kalamazoo trail study.</td>
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<td>Future trail studies in</td>
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<tr>
<td>Publication efforts</td>
<td>Writing and submitting journal articles with Multistate collaborators.</td>
<td>Writing and submitting journal articles from Safe Routes to School project and trails research.</td>
<td>Writing and submitting journal articles from the various brownfield projects.</td>
<td>Writing white paper for Singapore National Parks (CUGE division) Writing manuscripts in park and environment journals.</td>
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Cooperating agencies or current funders

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<th>Cooperating agencies or current funders</th>
<th>NIFA Multistate Research Project, NE1962</th>
<th>Michigan Department of Transportation National Park Service – CESU (at U of MN)</th>
<th>USDA Forest Service, Northern Research Station</th>
<th>Singapore National Parks – Centre for Urban Greenery and Ecology</th>
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Other researchers involved

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<th>Other researchers involved</th>
<th>Many university and agency researchers</th>
<th>Charles Nelson, Dept. of CARRS, MSU</th>
<th>Purdue University – David Klenosky</th>
<th>MSU Researchers who are active in Singapore</th>
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6. **PROBABLE DURATION**

This project is written for a five year time period (2013-2017). During these five years, publications will occur on some previously collected data pertaining to brownfield research conducted with colleague David Klenosky, Purdue University, and USDA Forest Service researchers. Data collected on trails and other forms of nonmotorized transportation over the past ten years will be analyzed and used to generate publications with Charles Nelson, MSU and MSU graduate students. Some newly funded projects are planned for 2013-2017 within Michigan, the Midwest, and in Singapore as a result of a year long proposed sabbatical in 2014. Publications on newer projects are most likely to be completed later in the five year period. I will aim to foster publication writing teams for the Multi-state plan in an effort to fulfill the five year agenda of conducting research and disseminating knowledge.

7. **PLANS TO DISSEMINATE INFORMATION FROM STATED RESEARCH**

AgBioResearch funds research and some of the dissemination of new knowledge to communities, government agencies and industry, and the public; all in an effort to enrich lives, steward natural resources, and grow sustainable communities. The proposed research project under the title of “Consumer Decision Making in Tourism and Outdoor Recreation: Working Toward Community Sustainability” will deliver scholarship at academic and practitioner conferences, through refereed publications, and through other printed and electronic media (i.e., hosted websites, webinars) so that other researchers, students, and practitioners around the world can build upon and extend research conducted at Michigan State University. The findings from this research will also deliver useful knowledge and suggested actions and outcomes to the industry and government agencies (e.g., state tourism offices, local convention and visitor bureaus and Chambers of Commerce, USDA Forest Service, Michigan Department of Transportation, Michigan Department of Natural Resources) to assist in the planning and implementation of more sustainable community approaches. Evidence-based recommendations will be consumer-focused toward improved experiences in natural settings and the supporting policies. Recommendations will also be made for new technologies and new resource management approaches that provide the best quality for the most efficient cost, ultimately yielding the highest return on spending and investment.

In the past ten years I have had a strong publication record in top journals in the fields of tourism, recreation and natural resources. I plan to continue to publish in tourism journals including Annals of Tourism Research and Journal of Travel Research. I also continue to publish in recreation and parks journals including Journal of Park and Recreation Administration and Journal of Leisure Research. I see some of the research from the Multi-state research projects and my international sabbatical being aligned with environment journals including Society and Natural Resources and Environment and Behaviors. Consumer behavior and decision making journals might also be interested in decision making in a sustainability context.
8. **TIMETABLE**: Not applicable.

9. **FINANCIAL SUPPORT**:

   My AgBioResearch assignment is 69% of a nine month appointment. Each academic year, 6.2 science months are directed to this plan. This equates to 31 science months or 2.6 science years in a five year time period.

10. **PERSONNEL**

    There are no leaders or technical assistance staff necessary for this AgBioResearch plan.

11. **INSTITUTIONAL UNITS INVOLVED**

    No other MSU departments are contributing to this AgBioResearch plan.

12. **REFERENCES**


13. COOPERATION

U.S.D.A., Forest Service, North Central Research Station, Evanston IL