

Equestrian Trail Riding: An Emerging Economic Contributor To The Local Rural Appalachian Economy

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ABSTRACT

The purpose of this paper is three-fold. First to summarize the importance of tourism in the Appalachian region with a focus on the State of Kentucky; second, to consider adventure tourism and the equestrian and trail riding segment as a potential contributor to Kentucky adventure tourism; and third, to illustrate the economic value of trail riding in the form of an economic impact study which indicates levels of community economic development opportunity. Importantly, for this publication, is the fact that this research was conducted by undergraduate students at Berea College. This initial research was conducted by undergraduate within the Entrepreneurship for the Public Good Program at Berea College in the summer of 2008 and the economic impact study field work was conducted by freshman undergraduates in a Creative Writing class with a focus on adventure tourism in the fall of 2008.

INTRODUCTION

The Appalachian Regional Commission (ARC), recommends that the best hope for stabilizing and diversifying Appalachia's economy lies in the creation and expansion of new enterprises that provide jobs, build local wealth and contribute broadly to economic and community development. The need to expand and support entrepreneurial activity as a means for revitalizing Appalachian communities led to the creation of Berea College's Entrepreneurship for the Public Good (EPG) program with a \$7.6 million dollar endowment. The EPG program is a model for making positive change in the Appalachian region through the two summer programs where students learn how new venture enterprises and nonprofit organizations employ responsible practices to provide jobs and build healthy communities. The EPG objective is to teach students from a variety of disciplines entrepreneurial leadership abilities to equip them to make a positive impact on the Appalachian region and beyond.

The Entrepreneurship for the Public Good program goals are to engage twenty Berea College students in entrepreneurial leadership activities in order to enable them to:

- explore theoretical and practical approaches to entrepreneurship for the public good in the context of economic development in Appalachia and beyond;
- identify and seize new entrepreneurial opportunities;
- develop and build leadership skills;
- prepare for professional careers with a purpose; and
- add value to small businesses and nonprofits in the region.

The EPG program helps Berea College students become agents of change in the Appalachian region and beyond. The program bridges several curricular and co-curricular areas and makes connections among and across programs. EPG helps students recognize the value of enterprises that create public benefits, whether they are operating within new ventures or nonprofit frameworks. EPG acknowledges that a broad spectrum of entrepreneurial enterprises, both commercial and philanthropic, is critical to the future of Appalachia. During the Summer Institute

which meets daily from 9am-3pm, M-F for eight weeks, students learn about entrepreneurship, leadership and community development through classroom sessions, discussions, field trips in the region, experiential learning opportunities that culminate into a business plan or feasibility study and a community partner project.

This paper begins with a summary from the Adventure Tourism: Seeding the Next Generation of Leslie County Entrepreneurs (2008) in eastern Kentucky. The EPGer discovered the opportunity for adventure tourism through a series of local Leslie County community based interviews and site visits in the Appalachian Mountains of eastern Kentucky.¹ Students also traveled to Boone County, West Virginia to assess the site of one of the most infamous American legends – the Hatfield-McCoy feud and conduct interviews with the Boone County Director of Economic Development and an all terrain vehicle (ATV) guided tour, parts and assessor, apparel and service recovery entrepreneur in Pineville West Virginia. While 96% of the county revenues are within the coal extraction currently, the State of West Virginia over 10 years has developed six systems of trails - the Hatfield-McCoy trails - totaling 700 miles of off-road trails for ATVs, dirt bikes, mountain bikes, horses, and hikers in several southern counties. The trail system has garnered national awards with rates and regulated trails systems, guided tours, permit systems, user required approved helmets and protective eyegear that has expanded into heritage, cultural and art destinations. The expanded economic effect now provides additional Civil War reenactments, theme parks, local festivals, reunions, and jamborees that stimulate the accommodations, arts and culture, camping, conferencing, local history and heritage, restaurants and visitor shopping.

To adventure enthusiasts, eastern Kentucky is widely embraced as an undiscovered gem. The region's terrain and rich, natural beauty has attracted mountain bikers, ATV riders, rock climbers and whitewater enthusiasts for the last several decades to some areas within the region that can easily be labeled world-class. One EPG student team discovered adventure tourism as a potential industry segment for creating economic development after mapping the community capitals and planning a community transformation program over a two year period (Wilson et al., 2008b). As EPG students returned to campus after the 2008 summer term another EPG student team member, Xiliang Lin and co-author of this paper, continued investigating implications of the EPG summer institute by assessing the economic implications in eastern Kentucky. Xiliang Lin conducted collaborative research with professor Hackbert. Professor Hackbert designed his fall classes in creative writing classes with a focus on nature-based, ecotourism and adventure tourism. This paper summarizes one module within those classes.

AMERICAN TRAVEL AND THE IDEAL AMERICAN VACATION TRIP

Approximately 124 million Americans took a vacation between 2005 and 2006, amounting to 55% of the adult population. United States family vacations are expanding beyond the traditional getaways to include newer, broader, more active, and meaningful travel plans (American Express Travel, 2008). The top motivators for family travel include the desire to introduce children to different cultures, customs and lifestyles, to experience new things together, and create lasting memories. Family travel now means more than the typical nuclear family trip of the past: Eighty-one percent (81%) of agents booked family vacations consisting of multi-generational trips that include grandparents. Additionally, more than two-thirds (69%) of agents reported grandparents traveling exclusively with their grandchildren – independent of Mom and Dad. Other vacation trends spotted by include adult children traveling with their parents (69%); family and family friends traveling together as one large group reported at sixty-seven percent. The extended family members including aunts, uncles and cousins taking trips as a collective group constituted twenty-eight percent of travel agents' bookings; families are increasingly drawn to active and experience-driven travel plans; and travel agents booked more outdoor, and adventure family vacations than the previous year by an increase of sixty-two percent (American Express Travel, 2008).

The typical American traveler took three trips per year with long weekends making up 59% of vacations taken in 2004 (SmithTravelResearch.com, 2008). The typical American household on average spends \$1,500 on a vacation trip and travels 1,200 miles from home; it is reasonable to assume that a portion of the high mileage associated with the average vacation trip can be attributed to the popular destinations found in coastal states and island vacations. According to the American Express Travel survey (2008), many of the long-standing, family-friendly United States destinations continue to hold strong for families, with the top five domestic destinations being: Orlando, New York City, Miami, Las Vegas and Hawaii. At least one trip per year is executed by plane, however, traveling by car continues to be the top form of transportation for a vacation trip. Vacation travelers take at

least two vacation trips that include hotel stays, but the most common accommodations are friends' or relatives' homes (24%) and moderately priced hotels or motels (19%). The most popular trip destinations are: cities and urban areas (39%), small towns and rural areas (26%) and ocean beaches (23%). The most popular activities are sightseeing (51%) and shopping (51%). The Ideal American Vacation Trip report found that overall, rest and relaxation, and spending time with significant others are the most important attributes of an ideal vacation trip. The study also found that ideal vacation destinations for American vacation travelers are those that offer an easy travel experience, a sense of fun and adventure and local flavor. Not surprisingly, money is by far the largest barrier to achieving an ideal vacation, but family and work responsibilities also weigh heavily on vacationers' trip satisfaction.

APPALACHIAN AND KENTUCKY TOURISM

Tourism looms large within the Appalachia's postindustrial economy. During the last quarter of the twentieth century this segment of the new service economy experienced sustained expansion as the extraction and manufacturing segments declined. Appalachian state tourism bureaus began to provide visitor information and develop long range strategies for economic revitalization through job creation, tourist expenditures and tax revenues gained from out-of-state tourists at the start of the twentieth-first century. In West Virginia visitors to the Mountain State contributed more than \$3.9 billion in 2006, up 6.1 percent from 2005 (West Virginia Development Office, 2008). North Carolina spent a record \$16.5 billion in 2007, an increase of 7.2 percent from 2006. The number was higher than the previous record of \$15.4 billion set in 2006 (North Carolina, 2008). In Virginia in 2005, \$16.5 billion, a 9.6 percent increase over the 2004 figure of \$15 billion, indicates 207,000 Virginians are directly employed in the tourism industry, with a total 2005 payroll of \$4.1 billion (Virginia.com, 2008). In Pennsylvania, domestic visitors spent an estimated \$25.7 billion in 2005, helping Pennsylvania rank seventh in the nation in domestic travel visits and expenditures. To put those figures in perspective, in the last three years, tourism in Kentucky increased nearly 24 percent and created more than 6,000 new jobs. Kentucky tourism is now a \$10.1 billion industry employing 176,840 people (Kentucky.com, 2008).

Tourism is not recognized in the Appalachian region as an official industry in the Census Bureau's Standard Industrial Classification (SIC) system (Crompton, 2001). The tourism industry includes parts of eight major SIC codes or employment groups: general merchandise stores, food stores, apparel and accessories, eating and drinking places, miscellaneous retail, hotels and other lodging places, amusement and recreation services, and arts and cultural facilities. The tourism "industry" is a generic umbrella term that advocates derive by aggregating the outputs from a combination of dozens of recognized industries. From an economist's perspective, treating tourism as a distinctive industry causes double-counting, because the outputs of those businesses that tourism advocates under the tourism industry are subsumed and already officially allocated to different industries. Three problems are thus present. First, policy makers may discount tourism indicators because of problems with double-counting and measurement. Data, assumptions, and calculations underlying the figures are often poorly defined with little agreement across studies (Buckley 2006). Second, some policy makers are skeptical as to the economic development that can be derived from tourism and the enlargement of the tax base. While studies indicate an increase in the tax revenues that the government can use, the infrastructure, facilities and park services are not viewed as contributors to sources of jobs and income that lead directly to residents' improvements in their quality of life. Third and finally, economic estimates can be highly sensitive to the details of methods used (Shaw and Jakus, 1996; English and Bowker, 1996).

ADVENTURE TOURISM

Adventurism has grown rapidly in recent years as outdoor recreation has become increasingly commercialized (Buckley 2000, 2004; Travel Industry Association of America, 2005). Adventure tourism is one of four major tourism segments based upon purpose of trip. The industry indicates for purposes of travel: (a) business-related travel; (b) personal business, including visiting friends or relatives (c) conventions and meetings; and (d) pleasure travel within which adventure tourism is located. The distinctions between nature tourism, ecotourism adventure tourism, adventure travel commercial expeditions, outdoor recreations and outdoor education are blurred (Weaver, 1998; Fennell, 1999; Manning, 1999; Buckley 2004 and Newsome et al., 2001).

Growth in the adventure travel industry over the next five years reveals a very optimistic future as reported by the Adventure Travel Trade Association (2006). The ATTA-sponsored research was conducted by Michigan State University in the first half of 2005 and studied trends among both consumers and the trade. With academic methodology, MSU randomly collected survey information from a representative sample of exhibitors and consumers at adventure travel trade shows within the United States.

Approximately 92% of adventure travelers surveyed report that over the next five years they plan to embark on the same number, or more, adventure vacations as they had taken in previous years. Considering that 56 percent of travelers surveyed take two to three vacations per year, the growth of the adventure travel industry looks healthy. Some of the research findings include:

A majority of respondents (68.6%) indicated they are planning an adventure travel vacation in the future. In the next five years, participants indicated they see themselves taking the 'same' number, or 'more' adventure travel vacations (91.6%), with a relatively low number (8.4%) indicating they see themselves taking adventure travel vacations 'less often'. These results suggest the outlook for adventure travel in the next five years to be positive. The average number of vacations respondents took per year was between one and three (66.6%), of which, 94.0% were adventure vacations. Over a quarter of respondents (27.5%) indicated taking between four and six vacations per year, although just 4.2% of those were adventure vacations (Adventure Travel Trade Association, 2006).

ADVENTURE TOURISM SEGMENTS

Adventure travel activities are considered 'soft adventure activities', such as walking, hiking, canoeing, orienteering, geo cashing, wildlife viewing, rock climbing, mountain biking, trail running, and bicycling, were most popular among respondents (85%). Planned adventure travel vacation activities most reported are in hiking (35%), water-related activities such as scuba diving, snorkeling, and surfing (17%), kayaking/rafting (11%), climbing/mountaineering (11%), cultural activities (8%), and biking (5.3%). Another noteworthy finding of the studies shows a shift in the consumer's definition of adventure travel itself, partly because tourist perceptions about what is encompassed within adventure travel have broadened. For the purpose of this study, the term adventure tourism means guided commercial tours where the principle attractions is an outdoor activity that relies on features of the natural terrain, generally requires specialized sporting or similar equipment and is exciting for the tour clients.

Horse riding adventure tourism is similar in many ways to other types of adventure tourism with one critical difference: The horse. Horses are animals and not equipment. Commercial equestrian have been divided onto four main categories: (a) guided commercial horse treks and trail rides; (b) fixed-site farmstays, guest and working ranches; (c) expert riding clinics and children's riding camps; (d) and horse-drawn carriages, commonly in urban areas (Ollenburg, 2005). The first category, equestrian trail riding and treks demonstrate impact to both the national and local economies as a form of adventure tourism (Ollenburg, and Newsome et. al., 2004). As reported by the American Horse Council, 42% of the approximate 9.2 million horses in the United States are owned and used for recreational trail riding purposes. Over 2 million people are horse owners contributing to nearly 4.6 million people who are involved in the industry either as owners, breeders, trainers, service providers, or otherwise. Kentucky is known as "the horse capital of the world." While other states may have more horses according to the Census of Agriculture, Kentucky has the largest component of the market value of agricultural sales. In 2003, horses produced \$800 million in cash receipts, representing 23% of the total agricultural cash receipts (Kentucky Agricultural Statistics Services). The Kentucky Horse Council (2004) estimated that in 2002 the direct economic impact of the Kentucky equine industry was more than \$1.77 billion dollars in 2002 including 31,800 jobs and a payroll of \$630 million.

THE ECONOMIC BALANCE SHEET FOR ADVENTURE ATTRACTION

Tourism professionals and public policy officials are increasingly curious about economic impact studies. Some public policy officials and managers undertaking studies within their governmental agencies; or are commissioning and partnering with outside experts. One group of contributors to tourism economic impact studies is undergraduate collegiate students. In 1991, the notion of benefits-based management was introduced. After more than two decades of pioneering work in identifying and measuring outcomes resulting from individuals engaging in

tourism and recreational activities public officials and tourism management shifted directions to the design and measurement of service or communicating tourism benefits in terms of outcomes rather than on how many came, and the cost per head.

Adventure tourism is activated by attractions. Visitors use some mode of transportation (e.g., automobile) to leave their homes and travel to attractions, which are supported by various kinds of services (e.g., hotels/motels, restaurants, retailing). The attractions and support services provide information and promote their offerings to target groups whom they have identified as potential visitors. In most communities, pleasure travel - adventure tourism – is an enterprise that the public sector drives. Most people are under the misapprehension that adventure tourism is the almost exclusive preserve of the commercial sector. The commercial sector offers essential transportation; support services, such as accommodations, restaurants, and retailing; and information and promotion dissemination. However, in most communities the public sector is the primary provider of the attractions that activate pleasure travel.

One conceptual model for developing economic impact attributed to pleasure travel - adventure tourism – is the Economic Balance Sheet (Compton, 2001). The Economic Balance Sheet shows that residents of a rural community “give” funds to their county officials in the form of taxes. The county official uses a proportion of these funds to subsidize production of an adventure event or development of a adventure tourism facility. The facility or event attracts nonresident visitors who spend money in the local community both inside and outside of the events and facilities that they visit. This new money from outside of the community creates income and jobs in the community for residents. This completes the virtuous cycle of economic development. Community residents are responsible for providing the initial funds, and they receive a return on their investment in the form of new jobs and more household income. The county agency essentially provides seed money and in-kind resources to leverage substantial economic gains for the community. If public sector resources are not used to financially underwrite the cost of staging these events, then the consequent economic benefits to the local community will not accrue. Private enterprises are unlikely to commit funds to organizing such events, because they are unable to capture a large enough proportion of the income spent by participants to obtain a satisfactory return on their investment.

In 2006, Kentucky started the Kentucky Flex-E Grant program that provides limited, short-term financial assistance to mini-grant projects that assist communities and other eligible entities in distressed counties to implement the Comprehensive Adventure Tourism Plan for Eastern Kentucky as developed by the Kentucky Department of Tourism. Eligible community projects will:

- Implement one or more recommendations made in the Comprehensive Adventure Tourism Plan for Eastern Kentucky;
- Encourage regional cooperation in the development of adventure tourism initiatives;
- Enhance local capacity to plan for and implement future adventure tourism projects; or
- Promote long-term sustainable economic results for the region and local community.

The Kentucky Flex-E Grant program was generated from the Appalachian Regional Commission’s (ARC) initiative to enhance assistance to distressed counties. Each project must demonstrate beneficiaries in a distressed county (counties) (Kentucky Governor’s Office for Local Development, 2006).

The traditional financial balance sheet presented by a state and county government assumes that the cycle starts and ends with the county government, rather than with a community’s residents. This is narrow and misleading because it includes only the taxes and revenues that accrue to local government from the event or facility. Such a narrow definition suggests that concern should be focused on income accruing to the county government from lease fees, admission revenues, increased sales tax revenues, and other revenue sources. However, this approach is flawed conceptually because the money invested does not belong to the county government; rather, it belongs to the county residents. Although it is efficient for the residents’ investment to be funneled through the county government, the return that *county residents* receive is what is important, not merely the proportion of the total return that filters back to the county government. The purpose of economic impact studies is to measure the economic return to county residents.

Crompton (2001) recommends five principles central to the integrity of economic impact analyses are reviewed. They are: (a) exclusion of local residents;(b) exclusion of “time-switchers” and “casuals”; (c) use of income rather than sales output measures of economic impact; and (d) use of multiplier coefficients rather than multipliers. First, economic impact attributed to adventure tourism relates only to new money injected into an economy by visitors, media, vendors, external governmental entities, banks and investors from outside the community. Second, some non-local spectators may have been planning a visit to the community for some time but changed the timing of their visit to coincide with the event. These time-switchers cannot be attributes to the event since the visit would have occurred without the event, albeit at a different time of the year. Causal are visitors who were already in the community, attracted to some other features, and who elected to go to the event instead of doing something else. If a governmental agency host an equestrian trail ride it is unlikely that any trail ride participants will be time-switcher or casuals and thus their expenditures will be not included.

Third, the use of income rather than sales output requires a discussion of the use of the multiplier concept. The multiplier concept recognizes that when trail riders come to an event they spend money in a community, that their initial direct expenditure stimulates economic activity and creates additional business turnover, personal income, employment and governmental revenue in the rural community. Subsequent rounds of economic activity reflect spending by local interindustry purchases and local governmental revenues. Their initial injection of money constitutes the *direct* economic impact on the community into one of four initial injections of money: restaurants, motel, retail or admission fees and concessions. The visitors’ initial expenditure is likely to go through many rounds as it seeps through the local rural economy, with portions of it leaking out each round until it declines to a negligible amount.

The first round of spending remains in the jurisdiction of local interindustry purchases, direct household income, local governmental revenues, non-interindustry purchases, non-local incomes and non-governmental revenues. These subsequent rounds of economic activity reflecting spending by local interindustry purchases and local government revenues are termed *indirect* impacts. The direct household income translates to local household purchases, savings and non-local household purchases. The proportion of household income that is spent locally on goods and services is termed an *induced* impact, which is defined as the increase in economic activity generated by local consumption due to increases in employee compensation, proprietary income and other property income. The *indirect* and *induced* effects together are frequently called secondary impacts.

In summary, three elements contribute to the total impact of a given initial injection of adventure tourism expenditures from out-of-town visitors. *Direct Effects*: The first round effect of visitor spending, that is, how much the restaurateurs, hoteliers and lodging facilities, and others who received the initial dollars spend on goods and services with other industries in the local economy and pay employees, selfemployed individuals and shareholders who live in the jurisdiction. *Indirect Effects*: The ripple effect of additional rounds of recirculating the initial visitors’ dollars by local businesses and local government. *Induced Effects*: Further ripple effects generated by the direct and indirect effects, caused by employees of impacted businesses spending some of their salaries and wages in other businesses in the city.

Fourth, Crompton (2001) asserts that the multiplier coefficient is a stronger predictive indicator for the policy maker. The multiplier coefficient should be used rather than the multiplier measure because it gives most guidance to policy makers. The multiplier merely indicates that if \$1 of direct income is created, a proportion of additional personal income will be created in other parts of the economy. It does not give a meaningful indication of the impact on personal income, because it does not include information on size of the initial leakage.

THE CASE STUDY

On October 3-5, 2008 the Knott County Trail Ride hosted by the Knott County Fiscal Court and the Knott County Saddle Club was held at Sutton Memorial Park in Knott County, Kentucky. A sample questionnaire for collecting the adventure tourism equestrian trail ride information needed to calculate economic impact was developed and modified according to guidelines cited by the Rocky Mountain Elk Foundation (2007). The undergraduate students of the GSTR 110 Sections M and X Creative Writing classes of 26 students field tested the survey, sampling methods, and IMPLAN modeling system during the City of Berea Spoonbread Festival September

19-21, 2008 (Hackbert, et, al., 2008). Students were instructed to only interview “out-of-town visitors” to the Berea festival. IMPLAN an input-output modeling system that builds its accounts with secondary data collected directly from local industries (Minnesota IMPLAN Group, 1997) was executed to analyze the findings. On October 1, 2008 five students presented the Spoonbread Festival economic impact study finding to the Berea Tourism Commissionⁱⁱ and on October 30, 2008 two students presented findings to the Berea Chamber of Commerce.ⁱⁱⁱ

Knott County Kentucky is developing hundreds of miles of trails on 43,000 acres of reclaimed mine property. A second economic impacts study was planned and executed with the support of WMTG Corporation^{iv} for the Knott Country 2008 Trail Ride Hosted by the Fiscal Court and the Knott County Saddle Club (See the Summary of the Finding in Exhibit 1).^v The Knott County Saddle Club members ride at no cost by displaying their membership card. The economic impact study was calculated in a four stage process. First a sample of 146 intercept surveys was asked how much money they anticipated spending on food, lodging, gas and merchandise souvenirs while in the area were accepted for analysis. Second, the data collected was extrapolated from the sample of respondents to that it represented expenditures for all group members who entered the event as an encampment. Stage three was to extrapolate the average expenditure to the full complement of the 2000 people who paid to enter the Knott County trail riding event. The total expenditures from all the 2000 paid trail ride participants was \$649,810.00. The final stage was to estimate the impact of this new money on the local economy. This was done using the IMPLAN input-output model for the trail ride and Knott County community including food and beverage, entrance fee, retail shopping, lodging expenses, private auto and horse trailer expenses, and other expenses.

The average per person expenditure was \$92.82 per day with an estimated average stay of 3.5 days. Food and beverage for the trail event is estimated at 25 percent of the total spending; entrance fee was calculated at 3%; retail sales 32% and private auto expenses and others are estimated at 40% of the total direct effect of the \$324.91 expenditure per person for the event. For each item, food and beverage, entrance fee, retail shopping and private auto expenses and others results show a total direct expenditures were approximately \$649,740 for the event (Table 1). The next stage was to estimate the impact of the new money in the Knott County community by using the IMPLAN input-output model for the community. It shows that total impact on sales was \$1,199,294. (Table 2), and impact on personal income was \$358,555 (Table 3).

Table 1 Total Expenditures for the 2,000 Out-of-Town Knott County Trail Riders

Items	Expenditures
Food and beverages	\$162,435.00
Entrance Fee	19,492.20
Retail Shops	207,916.80
Private Auto expense and others(Estimation)	259,896.00
Total	\$649,740.00

Table 2 Economic Impact on Sales

Items	Sales Coefficient				Percentage of Expenditure	Economic Impact
	Direct	Indirect	Induced	Total		
Food and beverages	1	0.2396	0.6678	1.9074	25%	\$309,828.52
Entrance Fee	1	0.0000	0.6647	1.6647	3%	32,448.67
Retail Shops	1	0.2007	0.9761	2.1768	32%	452,593.29
Private Auto expense and others(Estimation)	1	0.2222	0.3339	1.5561	40%	404,424.17
Total						\$1,199,294.64

Table 3 Economic Impact on Personal Income

Items	Personal Income Coefficient				Percentage	Economic Impact
	Direct	Indirect	Induced	Total		
Food and beverages	0.3114	0.0572	0.1859	0.5545	25%	\$90,070.21
Entrance Fee	0.9071	0.0000	0.1850	1.0921	3%	21,287.43
Retail Shops	0.3175	0.0471	0.2717	0.6363	32%	132,297.46
Private Auto expense and others(Estimation)	0.2953	0.0539	0.0929	0.4421	40%	114,900.02
Total						\$358,555.12

CONCLUSIONS

The purpose of this paper is to document one aspect of the value created by the Entrepreneurship for the Public Good Summer Institute 2008. The EPG Program provides an opportunity for students to discover and then assess rural opportunities in a local Appalachian community that can lead to economic development in the emerging segments of the tourism industry. This study calculates the economic impact of one segment – equestrian trail rides - of an emerging adventure tourism industry which attracts tourist and out-of-town visitors. The study identifies and estimates the value and viability for a rural community in measuring the direct and indirect impact of out-of-towners spending. The ease of replication and the structuring of a community partnership relationship with a college or university can provide to local residents and community leaders a model for economic diversification and can exhibit an interest in the promotion of their hometown and its local community assets. Elected officials can view the ease of execution of economic studies and can support policies that encourage and support adventure tourism growth and sustainability. Community resident and leaders can document emerging needs and trends in pursuit of financial support from the Commonwealth and federal government to assist with tourism development.

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**EXHIBIT 1
KNOTT COUNTRY 2008 TRAIL RIDE HOSTED BY THE FISCAL COURT
AND THE KNOTT COUNTY SADDLE CLUB**

Summary of the Findings:

It is estimated that 2,000 people paid to enter the event and another 1,000 saddle club members gained entrance as a part of their membership fees. During the event, a visitor intercept survey was conducted by the Berea College, GSTR 110 Creative Writing Classes^{vi} with a focus on NEAT (nature-based, ecotourism and adventure tourism) visitors. The questions included:

1. Where do you live?

Individuals and groups representing the following states traveled to the event. The number and the percentage of outbound communities of individuals or groups included: Florida (1), Illinois (1), Indiana (1), Kentucky (123), Michigan (1), Ohio (2), Virginia (8), and West Virginia (9).

Within Kentucky, the following out-of-town Kentucky cities were cited by 84% or 123 of the 146 visitors including: Ball (1), Banner (3), Belcher (1), Bethel (1), Brodhead (1), Buckhorn (1), Busy (1), Canada (1), Carrie (1), Cynthia (2), Dana (2), Dire (1), Dorton (1), Epleys (1), Elcomb (1), Emma (1), Emmalena (1), Fisty (1), Flemingsburg (2), Floyd County (2), Foy County (1), Hardy (2), Harrodsburg (1), Hazard (2), Hindman (6), Hueysville (2), Hyden (2), Jackson County (3), Jenkins (1), Kite (1), Knott County (9), Lacky (1), Leslie County (2), Letcher County (1), Lexington (3), Lick Creek (1), Lilse Fork (1), Louisville (2), Madison County (2), Magoffin County (2), Majestic (1), Manchester (2), Mousie (2), Melvin (1), McDowell (1), Mud Creek (1), Oil Springs (1), Paintville (1), Pike County (1), Pikeville (6), Prestonburg (2), Raven (1), Smallville (1), Salyersville (7), Somerset (1), Springfield (3), Stanville (3), Steele (1), Stopover (3), Talcum (1), Topmost (2), West Liberty (3), Wheelwright (1), Whitesburg (4), Williamsburg (1), and Winchester (2).

2. How did you hear about the event?

One hundred twenty-three separate groups or individuals responded to one or multiple media when asked: How did you hear about the 2008 Knott Count Trail Ride event? Radio (10), TV (16), Newspapers (14), Website (11), Friends and family (96) and other (28). The other media identified included: brochures, been here before, Saddle Club, direct mailing, post card and frequent visitor to the area.

3. How many in your group?

The intercept survey asked each respondent how many people were in the group. The groups varied in size from 1 to the largest of 50. The average group size was 9.41 persons in a group. Of those that replied, 48 respondents cited traveling with from 0 to 30 persons. The medium size reported included 3 persons in a group. When asked how many horses 135 responded. The range included traveling with 0 to 40 horses, with a median of 4 horses in a group.

4. Where are you staying?

Of the 149 visitors who responded to this question, 20 (13%) were staying at home, 43 (29%) camped, 83 (56%) stayed in RVs and trailers in Sutton Memorial Park, and 3 (2%) selected other arrangements such as driving home.

5. How many days will you be staying in the area?

140 individuals responded to the question on how many days they would be staying in the area with a range of 1 to 7 days. The number of total persons in the group or group size was multiplied by the length of stay producing the average length of stay per person. The length of stay for the average person was 3.5 days in the area.

6. *How much do you anticipate spending on food, lodging, gas and merchandise souvenirs while in the area?*

130 persons or groups responded to this question. The total cited expenses divided by the group size produced an average spending per person on food, lodging gas, and merchandise in the area. The average spent per person was \$92.83 per day. With the length of stay averaging 3.5 days in the area, average expenditures came to \$324.91. The estimated economic impact, at the lowest threshold of paid event visitors, to Knott County was \$648,000.

7. *Which years have you attended?*

122 persons or groups responded to this question. Fifty-eight persons (48%) attended the 2006, 2007 and 2008 events; twenty-five persons (12%) attended 2007 and 2008 event. The spring 2008 event produced 28 (23%) repeat visitors to the Knott County Trail Ride.

8. *What can we do or add to make the event better next year?*

111 persons or groups responded. Overall respondents enjoyed the event. Positive comments included:

- *Good job, flat tops were good.*
- *Great trails; good trail riding.*
- *Fantastic, Awesome place, Good job (mentioned frequently).*
- *Great event (mentioned frequently).*
- *Excellent place to ride (frequent mentions).*
- *Flat tops were good, great trails.*
- *Beautiful and breath taking; Reclaimed land is very nice; looks great, could use some trees.*
- *Very well kept and very well organized.*
- *I would come up just to camp on weekend if hill was black topped.*
- *Very enjoyable; beautiful and peaceful.*
- *It amazes me how they can take out a mountain and make some of the most beautiful land.*

A few suggestions and/or recommendations for the next year included:

- 49 (44%) people discussed the availability or lack thereof of water.
- 20 (18%) referred to safety factors: lighting at night, proper sanitation and the road accessibility of horses and motorized vehicles, and alcohol issues.
- 17 (15%) people reported the lack of electricity.
- 14 (13%) people referred to the lack of the availability and high price of showers.
- 12 (7%) people were disappointed with the lack of restrooms.
- 11 (6%) people recommended the watering of the camping area to reduce dust.
- 11 (6%) people commented on the quality of the road.
- 6 (4%) people referred to the trail markings: lack thereof, difficulty, and map locations.
- 6 (4%) people referred to the cost and the distance or accessibility of food.

Notes

ⁱ The Entrepreneurship for the Public Good 2008 Summer Program interdisciplinary candidates includes Amelia Wilson, Gilbert Washington, Victor Henry, Lorena Luna, the co-author of this paper, Xiliang Lin.

ⁱⁱ General Studies Creative Writing freshmen students that executed the presentation before the City of Berea Tourism Commission included Eliana Pana, Rachel Barber, Travis Kreimer, and Samuel Lewis on October, 1, 2008.

ⁱⁱⁱ General Studies Creative Writing freshmen students that executed the presentation before the City of Berea Chamber of Commerce included Stacia Berend and Tierah Ellard on October, 30, 2008.

^{iv} On October 14, 2008 The WMTH Corporation was awarded First Place by the Kentucky Tourism Council Travel Awards for Excellence in Marketing for their "Elk in Kentucky" Marketing Campaign.

^{Iv} General Studies Creative Writing freshmen students that executed the presentation before Knott County Chamber of Commerce included Eliana Pana, Molly Jack, and Elizabeth Williams on October, 30, 2008.

^{iv} General Studies Creative Writing freshmen students that executed the field research intercept survey on October 4, 2008 in Knott County included Rachael Barber, Tierah Ellard, Carissa Estep, Eliana Pana, LeAnna Kaiser, Helen-Paul Keahi, Travis Kreimer, Chase Miles Harris, Amber Mollet, Zach Narovich, Joey Patterson, Clifford Sakutukwa, and Georgeanna Ward.

NOTES