

## TRUCK & TRACTOR PULLS: PLOWING INTO THE FUTURE OF RECREATION, LEISURE, & TOURISM

GRETCHEN NEWHOUSE BERNS  
UNIVERSITY OF WISCONSIN – LA CROSSE

*With a fan base of over 1.4 million direct and an additional 28 million enthusiasts through various media capacities, truck and tractor pulling is a growing leisure activity. More than just an event, truck and tractor pulling have evolved into a recreation experience with fans spending a considerable amount of time and money engaging in other activities beyond the pull. The purpose of this study was to acquire information from attendees to better understand large events, such as a truck and tractor pulls. Research indicated that many truck and tractor pull fans rely on positive and negative word of mouth to make the decision to attend. This study of a large recreation event will further assist professionals in the field of recreation, leisure, and tourism as they continue to understand the characteristics of successful event experiences.*

Truck and tractor pulling has evolved into a heavily attended major motor sport in the United States and abroad; however, little research has been conducted on this growing leisure activity. The purpose of this study was to acquire information from attendees to better understand large events, such as a truck and tractor pull. Information was gathered from attendees at the Wisconsin Dairyland Super National Tractor Pull hosted by the Monroe Country Agricultural Society in Tomah, Wisconsin, sanctioned by the National Tractor Pullers Association (NTPA). The objective of truck and tractor pulling is to find the strongest machine and the best driver. Each truck and tractor driver attempts to pull a progressive load of weight as far as possible down a dirt track. Different to every other motor sport in the world, it is not about the fastest driver and speed is of minor concern.

### GROWING POPULARITY OF TRUCK & TRACTOR PULLING

There are many associations sanctioning pulling events; yet, the NTPA alone conducts over 250 truck and tractor pulling events each year. A pulling event may have up to six pull sessions over a weekend, sometimes with two pull sessions per day. One pull session is a single show with average attendance from 3,000 to 5,000 people. Several weekend pulling events have 10,000 or more people

per pull session ("Demographics," 2008).

In addition to live attendance, up to 28 million people watch the sport on TV or follow pulling through various magazine publications, such as *The Puller*, *Full Pull*, *The Hook*, and *Tractor Pulling* ("Demographics," 2008). Thousands of people tune in weekly to watch the sport on ESPN and Rural Free Delivery TV (RFD-TV), which is a United States satellite and cable television channel devoted to 24 hours of rural issues, concerns, and interests ("RFD-TV", 2008). Millions of people have access to a total of 208 airings (four times per week) of the "NTPA Championship Pulling Series" which is dedicated to this sport ("Demographics," 2008). Various tractors from pulling events also appeared on the History Channel's program *Modern Marvels* 12th season episode "World's Strongest" and Discovery Network's Travel Channel show *Kings of the Road* episode "Tractor Pull Showdown" ("National Tractor Pullers Association," 2008).

The NTPA also reaches fans through print media by publishing *The Puller* magazine, America's most popular monthly pulling publication. *The Puller* has a circulation rate of approximately 10,000 people and is available in over 650 Tractor Supply Company (TSC) stores across the country. *The Puller* magazine sales doubled and are close to tripling since it first became available in TSC stores in June 2005. *The Puller* passes through a minimum of at least two to three people's

hands for every issue distributed ("NTPA advertising & marketing opportunities," 2008).

This huge pulling fan base through various media capacities stretches from the East Coast to the West Coast and everywhere in between. But truck and tractor pulling is especially popular in the region known as the Heartland of America, the farmland country of the Midwest where this study was conducted. And this was where pulling grew from humble beginnings.

### HISTORY OF TRUCK AND TRACTOR PULLING

In the late 1800s, farm animals were utilized to pull plows and wagons (Ashcroft, 1993; Grimm, 1988; Savage, 2000; Webb, 2004). Farmers occasionally held contests to see whose horse or oxen could pull the heaviest rock the farthest. Then, in the early 1900s, machines replaced the animals and tractors were used to plow the fields (Ashcroft, 1993; Grimm, 1988; Savage, 2000; Webb, 2004). The stronger the tractor, the faster and deeper the plow could go. Farmers proudly displayed their new machinery at local county fairgrounds and picnics and engaged one another in various pulling competitions. These informal events were entertaining to farmers and onlookers alike.

It was not until 1929, however, that the first tractor pulling contests known as "tug pulls" were officially organized in Bowling Green, Missouri and Vaughnsville, Ohio (Ashcroft, 1993; Grimm, 1988; Savage, 2000; Webb, 2004). In a "tug pull", a sheet of steel was loaded with rocks, sandbags, concrete slabs, or other heavy objects and then hitched to the back of a tractor. If the tractor could pull the weight ten feet, it would qualify for the next round. If not, it was out of the contest. For the next round, more heavy objects were loaded onto the steel sheet. The competition continued for as many rounds as it took until only one tractor remained that could pull the weight ten feet. The tractor was declared the champion.

In the 1960s, the steel sheet replaced a step-on sled (Ashcroft, 1993; Bargo, 1988; Grimm, 1988; Savage, 2000; Webb, 2004). Men lined up along the track approximately ten feet apart. Then, as the tractor came down the track, the men

stepped onto the sled, one by one, adding their weight to it instead of piling on heavy objects as in the past. More men stepped onto the sled as the tractor continued down the track until finally it could no longer haul the weight and came to a stop. The tractor that traveled the farthest was declared the winner.

During this time, drivers also competed in pulling contests with their trucks using the step-on sled. The biggest difference between trucks and tractors was that truck pullers were allowed only one engine. Today, truck and tractor pullers have a limit on the number of engines allowed (up to six engines) and weight (6,000-10,000 pounds) depending on the class of competition within the sanctioning association (G. Randall, personal communication, February 18, 2009). As a result of the massive horsepower engines (1,000-12,000 depending on class) in trucks and tractors, a great amount of noise was generated.

Because of the noise, many fans began to wear earplugs during the event (G. Randall, personal communication, February 18, 2009). As much noise as a rock concert is generated with some tractor divisions, but the blasts are only 15-20 seconds long; therefore, it does not violate any noise standards (G. Randall, personal communication, February 18, 2009). Regardless of the noise generated, drivers continued to improve their engines by adding more horsepower. Once this horsepower had been added, the tractor's primary job was to pull things; it could no longer cultivate corn, plow a furrow, or even bush-hog a field.

By the 1970s, tractors and trucks were so powerful that the step-on sled was difficult and hazardous for men to step on because of the speed generated (Ashcroft, 1993; Grimm, 1988; Savage, 2000; Webb, 2004). Using a step-on sled was a good way to get fans involved in the pull, but it lacked precision. Sometimes people wandered off for various reasons and had to be replaced, always by someone a bit stouter or thinner, thereby casting doubt on the results and leading to arguments. If a friend was pulling, a man was likely to stand on the very back edge of the sled to ease friction. A less popular puller might find everyone crowded forward trying to get the sled to dig into the track. The sport also needed a more objective, scientific measure of pulling power. A new sled was created that still is used today.

The sled pulled by trucks and tractors today is an example of progress in the sport of pulling. It is a device known as a 'weight transfer machine' that looks a lot

like a truck trailer with an estimated price of \$150,000 (G. Randall, personal communication, February 18, 2009). It is a long flat bed with tires in the back. In the front of the sled is a piece of steel known as a "skid plate". Up to 35,000 pounds of weight are over the rear tires at the start of the pull, and there is no pressure on the skid plate up front because it is off the ground (G. Randall, personal communication, February 18, 2009). As the sled is pulled forward, the weights are automatically moved forward up the long flatbed toward the front. With more and more weight coming toward it, the steel plate sinks lower until finally it skids along the ground. As the truck or tractor works to overcome the resistance, the skid plate sinks deeper into the ground. It takes a powerful vehicle to reach the finish line hauling all that weight and a steel skid plate digging into the ground.

Along with a certified sled, the officials at a pulling event make the track even and uniform for everybody, from the first puller to the last, so no one is denied the opportunity to achieve the maximum traction and power from the vehicle for each trip down a 300-foot track. Making it to the finish line is called a 'full pull' and uses three-20 gallons of fuel depending on what type of tractor and how many engines. It should be noted that tractors burn more racing alcohol than diesel or gas (G. Randall, personal communication, February 18, 2009; D. Schreier, personal communication, February 27, 2009). If two or more drivers accomplish a full pull in the same contest, a pull off takes place. This is an event in which the pullers who have gone the distance the first time battle it out again—this time with more weight added to the sled.

With hopes of reaching the finish line, pullers travel thousands of miles and spend hundreds of thousands of dollars on a truck or tractor with every effort made to get the most out of their investments (Bargo, 1988). For champions who win the battle at some pulling events, there are thousands of dollars in cash and prizes through major event sponsors all organized by various truck and tractor pulling associations.

## TRUCK & TRACTOR PULLING ASSOCIATIONS

The NTPA was established in 1969 by representatives from eight states (Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Pennsylvania) ("About NTPA/WPI," 2008). These representatives met to establish uniform rules and give the sport structure. A year

later, the NTPA established a championship series with pulling divisions. Through a circuit of pulling events during the season, points are awarded based on the place of finish. At the end of the season, the points are tallied and a winner announced.

The NTPA's Grand National Circuit features the most competitive and best performing professional pullers. The NTPA hosts 25 major events on its premier Grand National tour, with 45 regional events supporting the Grand Nationals each season. The NTPA has state member associations in small cities and towns throughout rural America. These locations represent where NTPA pulling is the top entertainment event of the season with a total of more than 250 events each season ("Sponsorship opportunities," 2008). Major pulls are conducted in Tomah, Wisconsin; Chapel Hill, Tennessee; Henry, Illinois and Bowling Green, Ohio; and dozens of other small rural communities around the country. The success of the NTPA spawned substantial competition from other associations.

Since 1991, other tractor pulls and sanctioning bodies have been established and created similar opportunities for professional tractor pulling (Gordon & Smith, 1988). The Outlaw Truck and Tractor Pulling Association is the major organizer west of the Mississippi River, and the American Tractor Pull Association and NTPA fight over pulling in the heartland east of the Mississippi (Webb, 2004). Along with other associations that organize truck and tractor pulling, such as the US Hot Rod Association and Pro Pulling League, many states also have their own association. Regardless of the association planning the pulling event, they all have the same goal, to match trucks and tractors against one another to see who can pull the sled the farthest.

Today, professional truck and tractor pull competitions are not only held in the United States where pulling was first established, but also in Canada, Brazil, Australia, Finland, Sweden, Norway, Denmark, Germany, The Netherlands, Belgium, Luxembourg, France, Switzerland, Italy, Spain, Austria, Liechtenstein, Greece, New Zealand, and Japan. With the sport of the pulling established in Europe in 1977, pulling continues to progress throughout Europe and is currently spreading into the former east bloc in Hungary and Slovenia ("What is tractor pulling?," n.d.). Truck and tractor pulling has evolved into a heavily attended major motor sport in the United States and abroad; however, little research has been conducted on this growing leisure activity.

## METHODOLOGY

### PURPOSE

The primary purpose of this study is to acquire information from attendees at the Wisconsin Dairyland Super National Tractor Pull hosted by the Monroe County Agricultural Society in Tomah, Wisconsin sanctioned by the NTPA. Through a written survey, questions were asked to determine the characteristics of who attended the pull and what leisure activities attendees did in addition to this large event. Then frequencies were computed through SPSS.

### DATA COLLECTION

Information was obtained from fans who attended any one of the four pull sessions of Wisconsin Dairyland Super National Tractor Pull hosted by the Monroe County Agricultural Society in Tomah, Wisconsin sanctioned by the NTPA on June 20-22, 2008. The survey instrument was distributed by six trained survey volunteers and completed by the respondents in their stadium seats before, during, and after pull sessions. Incentive prizes, such as calendars, hats, and commemorative pins, were given to all respondents after completing the survey. The number of surveys gathered in this quota sample was 1,245, which exceeded the number needed for the 40,000-60,000 people who attended the pull. In quota sampling, the researcher computes a minimum sample size to fulfill a specific quota (Henderson & Bialeschki, 2002). Once the quota is reached, no one else has a chance of being selected. With a relatively varied population, a minimum sample size of 1,045 would be the required quota for three percent sampling error (Salant & Dillman, 1994).

### RESULTS

With data collected from respondents at the truck and tractor pull, the following results describe who attended the pull, what leisure activities attendees did in addition to this large event, and market segments by distance.

### ATTENDEE CHARACTERISTICS

The results of survey indicated that men greatly outnumbered women at the pull with attendance for males at 75.6% (n=922) and females at 24.4% (n=297). The largest age groups in attendance at the pull were 25 to 34 (23.0%, n=284), 35 to 44 (24.4%, n=302), and 45 to 59 (25.9%, n=320) years old. With over 75% (n=1006) of attendees between the ages

of 25 and 59, the average number of years attending this event was 8.6 years. Over 21% (n=264) attended the pull for the first time with parties of various sizes.

Over a third of these respondents (35.3%, n=435) indicated that they came in a group, followed closely by a family at 31.4% (n=386). Nearly a quarter (23.1%, n=284) attended as a couple, and 10.2% (n=126) came alone. The average number of people per party was 4.95 people. Once the results were placed in ranges, the results show that 43.5% (n=530) of respondents were in parties between three and five people.

When asked how they heard about the event, the majority of respondents heard about the event from family and/or friends (65.7%, n=762). Eighty-five percent (n=1044) stated a male made the decision to attend, with over half (52.2%, n=634) visiting the Wisconsin Dairyland Super National Tractor Pull website to assist them with making the decision. Over 63% (n=634) also reported that they watch truck and tractor pulling on RFD-TV when they do not have the opportunity to travel to the actual pull location.

For those fans with the opportunity to travel, the distance traveled was calculated by examining zip codes gathered from respondents and converting it to a distance. The conversion was done by using a geographical information system computer program called ArcGIS 9.3 (Environmental Systems Research Institute, 2008). This computer program used zip code cartographic boundary files provided by the U.S. Census Bureau. Using this method, the distance recorded from the pull location was the distance in a straight line, or "as the crow flies" rather than road miles traveled. The average distance traveled to the truck and tractor pull in Tomah, Wisconsin was 121.87 miles. More than half (57.7%, n=705) traveled from a distance between 50 and 149 miles. Nearly 95% (n=1156) of all respondents came from the state of the pull location, or a border state. Fans from thirty states (29.8%, n=364) and two foreign countries, The Netherlands and Germany, were represented at this event.

Truck and tractor pulling fans that traveled to the event came from a variety of income ranges and education levels. The highest income level was \$50,000-\$74,999 (25.7%, n=299), with 58.2% (n=706) of survey respondents' highest education level being high school. The \$20,000-\$34,999 and \$35,000-\$49,999 income ranges were next at 18.8% (n=219) and 18.6% (n=216) respectively. The results showed that 26.9% (n=313) of attendees had an income level of less

than \$35,000 regardless of the industry employed.

Respondents chose from a list of 18 industries in which they work, the top six industries are shown (Table 1). When not at work earning an income, truck and tractor pull attendees enjoyed an array of hobbies. Table 2 represents respondents' favorite hobbies which they chose from a list of 25 hobbies and ranked with the first being their favorite, second their second favorite, and third being their third favorite hobby. The hobbies that had a total greater than ten percent are shown in this table; all other hobbies are not shown. This table shows that overall respondents' favorite hobbies were hunting and fishing at a total of 38.9% (n=477), with NASCAR second at 33.2% (n=407). Also, while the intent of the question was to find the hobbies of fans other than pulling, pulling made the top hobbies as a write-in. Specifically, 7.2% (n=88) of respondents chose it as first favorite hobby.

### ATTENDEE LEISURE ACTIVITIES BEYOND THE PULL

To understand what attendees did beyond the truck and tractor pull, researchers first examined the number of overnight stays. Of attendees who stayed overnight (56.8%, n=669), the average number of nights stayed was 2.51 nights. Respondents who choose to stay overnight typically stayed between two and three nights (71.5%, n=474). Of those who stayed overnight (for any number of nights), 47.1% (n=315) visited other local areas beyond the pull.

A survey question asked what types of other areas were visited beyond the pull. As expected, the majority of the respondents visited restaurant type facilities [sit-down restaurants (50.1%, n=216), bars/taverns (45.4%, n=194), and fast food restaurants (42.4%, n=181)] (Table 3). Beyond restaurant type facilities, 13.3% (n=57) of respondents visited parks, and 11.7% (n=50) visited the resort area in addition to attending the pull.

### MARKET SEGMENTS BY DISTANCE

Researchers subdivided respondents into homogenous groups to more easily understand the attendees of the Wisconsin Dairyland Super National Tractor Pull. This grouping method is commonly referred to as market segmentation. In this report, attendees of the truck and tractor pull were grouped in the following geographic market segments (Table 4): zero miles, one to 49 miles, 50 to 99 miles, 100 to 149 miles, 150 to 199 miles, 200 to 249 miles, and over 250 miles. This

**TABLE 1. Top Occupational Industries Employed**

Industry Type	N	Percentage
Agriculture/Forestry	282	22.9%
Manufacturing	187	15.2%
Construction	157	12.7%
Transportation	116	9.4%
Auto/Truck Repair	77	6.3%
Health Services	62	5.0%

*Note. Percent does not equal to 100% because Industry Types under 5% are not shown.*

**TABLE 2. Top Individual Hobbies**

Hobby	1 <sup>st</sup> Hobby	2 <sup>nd</sup> Hobby	3 <sup>rd</sup> Hobby	Total Hobby Percentage
Hunting/Fishing	17.9%	12.9%	8.1%	38.9%
NASCAR	10.9%	12.8%	9.5%	33.2%
Snowmobiling	7.6%	9.5%	5.8%	22.9%
Tractor Restoration	8.8%	7.3%	6.7%	22.8%
Camping	4.8%	9.4%	7.7%	21.9%
All-terrain vehicle	6.7%	8.3%	5.7%	20.7%
Football	6.9%	6.3%	6.7%	19.9%
Travel	3.6%	4.9%	8.6%	17.1%
Pulling (write-in)	7.2%	1.4%	1.5%	10.1%

*Note. Total percent exceeds 100% because respondents could give more than one answer. Percent is based on number of spectators (n=1227) who responded to the question, not the total number of responses. Not all hobbies are shown, only hobbies totaling greater than 10%.*

**TABLE 3. Leisure Activities Beyond the Pull**

Leisure Activity	N	Percentage
Sit-down Restaurants	216	50.1%
Bars/Taverns	194	45.4%
Fast Food Restaurants	181	42.4%
Parks	57	13.3%
Resort area	50	11.7%
Specialty/Amish Shops	38	8.9%
Clothing Shops	31	7.3%
Military Base	22	5.2%
Bike Trail	10	2.3%
Other	47	11.0%

geographic segmentation method was utilized to examine the effectiveness of resources dedicated to various communication and distribution channels based on location.

Of those who attended the truck and tractor pull, 5.3% (n=66) were from the host town of Tomah, Wisconsin (zero miles). These attendees were considered the "locals" that attended this event. Even though they live and work in the host town, the survey asked if they stayed overnight in any other lodging facilities. Eighty-five percent (n=56) of these attendees did not

stay overnight during this event. Of those attendees who stayed overnight, 40% (n=4) slept in a campground (An on-site campground was created for the truck and tractor pull event.). Many "locals" heard about the event through word of mouth (WOM) communication from family and/or friends (44.4%, n=29). Nearly 50% (n=32) of this segment attended this event with family, 20% (n=13) as a couple, 17% (n=11) by themselves, and 15% (10) with a group. This segment spent the least; on average they spent \$122.54 per attendee for the experience.

The next market segment was those attendees who came from a distance between one and 49 miles. This segment generally was similar to the zero miles segment in that it was located very close to Tomah, Wisconsin and attendees would still be considered mostly local. The vast majority of the respondents in this segment did not stay overnight (86%, n=187). Nearly 45% (n=98) of those who did stay overnight stayed in a campground. At a distance between one and 49 miles, 23% (n=50) of respondents heard about the truck and tractor pull from family and/or friends, and another 23% (n=50) also heard about this event through flyers. Those attendees who came this distance typically attended this event with family (38.5%, n=84). Those fans who attended this event in a group type party increased in this segment to 27% (n=59). Another 21% (n=46) of respondents in this segment attended as a couple, with those who attended by themselves accounting for 12.8% (n=28). The average amount of money spent increased to \$188.50 per attendee for the experience.

The 50 to 99 mile market segment was the largest of all the segments, accounting for 32.8% (n=408). In this segment, the balance flipped for those respondents who stayed overnight. Exactly 50.0% (n=204) stayed overnight in this segment. Of those who did stay overnight, 52.0% (n=102) stayed in a campground. Many attendees in the 50 to 99 miles market segment heard about the truck and tractor pull through family and/or friends (43.3%, n=177). Typically, fans in this segment came to the pull with a group 36.5% (n=149). Those who attended with family were 29.8% (n=122), couples consisted of 24.5% (n=100) of the respondents, and only 9.2% (n=38) attended alone. Average spending also increased \$100 in this segment to \$287.35 per attendee for the experience.

The second largest segment (25.4%, n=316) belonged to those who came from a distance between 100 and 149 miles. Of this market segment, 78.8% (n=249) stayed overnight with many as 41.3% (n=103) at campgrounds. Worth noting were those who enjoyed the hobbies of pulling and restoration at a combined total of 25.0% (n=79). Those attendees in this segment who heard about the truck and tractor pull through family and/or friends increased to 50% (n=158). Those who attended this event in a group increased to 46.3% (n=146), making this segment the largest for those who attend in a group. Only 21.8% (n=69) attended as a family, the smallest percentage for families of all market segments. This market segment

TABLE 4. Market Segments

	0 miles (5.3%, n=66)	1-49 miles (18.5%, n=218)	50-99 miles (32.8%, n=408)	100-149 miles (25.4%, n=316)	150-199 miles (7.5%, n=93)	200-249 miles (2.6%, n=32)	Over 250 miles (8.3%, n=103)
Median Number of Years Attended	9	6.5	5	5	4	3	2
Percentage Who Heard about Event from Family and/or Friends (Word of Mouth)	44.4%	23.0%	43.3%	50.0%	52.4%	38.9%	38.6%
Average Party Size	3.95	4.33	5.20	5.73	4.58	4.19	3.93
Percentage with Overnight Stay	15.0%	14.0%	50.0%	78.8%	50.0%	87.5%	91.4%
Average Number of Nights Stayed	3.33	2.70	2.34	2.36	2.63	2.59	3.02
Average Money Spent	\$122.54	\$188.50	\$287.35	\$414.75	\$653.10	\$611.00	\$629.47

had 24.4% (n=77) of respondents attending as a couple, and 7.5% (n=24) came alone. Average spending increased substantially to \$414.75 per attendee for the experience.

In the next market segment, 7.5% (n=93) of all respondents came from a distance between 150 and 199 miles. Of respondents in this market segment, 91.2% (n=85) stayed overnight. Those who heard about the truck and tractor pull though family and/or friends were 52.4% (n=49) of respondents. The majority of respondents still attended the event with others in a group (39.1%, n=36). Attending with family increased to 31.5% (n=29), as a couple to 20.7% (n=19), and alone to 8.7% (n=8). Average spending took its biggest increase in this segment to \$653.10 per attendee for the experience.

The 200 to 249 mile segment was the smallest of all segments with 2.6% (n=32) of the total number of respondents. In this market segment, 87.5% (n=28) of respondents stayed overnight with 46.4% (n=13) staying in the campground. Worth noting, a combined 20% (n=6) enjoyed the hobbies of pulling and tractor restoration. Utilizing WOM communication, 38.9% (n=12) of respondents heard about the pull from family and/or friends. Many in this segment attended this event as a couple (34.4%, n=11), family (28%, n=9), group (25%, n=8), and some came alone (12.5%, n=4). Average spending decreased in this segment to \$611.00 per attendee for the experience.

The last segment was 250 miles or more and represented 8.3% (n=103) of all respondents. In this market segment, 91.4% (n=86) stayed overnight, with 26.7% (n=23) staying in a campground. With a combined total of 42% (n=43),

many in this segment most enjoyed pulling and tractor restoration. Those who heard about the truck and tractor pull from family and/or friends were 38.6% (n=40). The majority of respondents in this segment attended this event with family (44.6%, n=46), 26.7% (n=28) said group, 18.8% (n=19) attended as a couple, and nearly 10% (n=10) came alone. This segment also spent on average \$629.47 per attendee for the experience.

## DISCUSSION

At first rural, farm-oriented, and occurring only occasionally, informal truck and tractor pulls provided amusement at fairgrounds and picnics with mostly local attendees. Today, many fans from all over the United States as well as foreign countries hear about the event from friends and family and then travel with them to not only attend the truck and tractor pull, but to participate in an experience. Over half of the attendees traveled between 50-149 miles, and many stayed overnight just to enjoy the experience (56.8%, n=669). The average number of nights stayed was 2.51. Interestingly even 15% of the “locals” from the host city Tomah, Wisconsin stayed overnight with many at the campground located at the event location. Of those who stayed overnight (for any number of nights), 47.1% (n=315) participated in other leisure activities beyond the pull.

Truck and tractor pull “enthusiasts” traveled greater distances (over 200 miles) and spent more money experiencing the weekend event than other attendees. Those respondents who wrote in tractor pulling or selected auto/tractor

restoration as their favorite hobby could be considered tractor pull “enthusiasts” because of the distance traveled and money spent. A combined 20% enjoyed pulling and tractor restoration as their favorite hobby in the 200-249 miles traveled market segment and spent an average \$611.00 for the entire experience. Forty-two percent enjoyed pulling and tractor restoration from the 250+ miles traveled market segment and spent \$629.47. Since the study indicated that many tractor pull “enthusiasts” were willing to travel greater distances and spend more money for the experience, future promotion efforts may be focused on the main event hobbies of pulling and tractor restoration when marketing to distances greater than 200 miles.

For other fans, gathering with family and friends may have been their primary reason for attendance. Many respondents arrived with family and friends several days early to recreate and tour the surrounding area before they attended the truck and tractor pull weekend event. The results showed that 43.5% (n=530) of respondents were in parties between three and five people. With this information, promoters should develop strategies that better market the experience to groups and families. Potential strategies include incentives or discounts on various aspects of the experience (e.g. lodging, restaurants, tourist attractions, etc.) based on the number of individuals in the party. It would also benefit large events to communicate this information through their websites. Since over half of respondents visited the truck and tractor pull website to assist in making the decision to attend, these group incentives or discounts would encourage more website usage.

Besides the website, many attendees initially heard about the truck and tractor pull weekend experience from friends and/or family. This WOM communication between family and friends was found to be the most effective media outlet (65.7%, n=762). WOM literature defines word of mouth as a conversation where someone tells a friend or acquaintance what he/she likes and/or dislikes about a product or service. This conversation is usually between a knowledgeable person explaining performance, quality, trustworthiness, etc. and a less knowledgeable friend who someday may wish to purchase the product or service they are discussing. Some researchers believe word of mouth may have more influence on the purchase of services or experiences, such as the truck and tractor pull event, than retail products. Certain characteristics of services (intangibility, inseparability, participants as producers and consumers, and heterogeneity) create greater consumer risk and uncertainty when attempting to form their expectations. To reduce the potential risk and uncertainties (e.g. financial, performance, social, psychological, safety, inconvenience, or time loss) associated with the purchase of a service (Brooker, 1984; Jacoby and Kaplan, 1972; Roselius, 1971), consumers will place greater reliance on WOM from friends or family when purchasing services (Haywood, 1989; Lovelock, 2001; Murray, 1991). Another likely reason for this increased reliance on WOM with service products is services are generally experiential in nature, meaning they must be experienced before the customer can evaluate their true value or quality (Newhouse, 2005). More specifically, consumers do not have the opportunity to sample or examine a service, unlike retail products, before purchasing it, so they frequently ask people who had an experience with the service (van der Smissen *et al.*, 1999). In the service field of recreation, leisure, and tourism, most organizations advertise the features and benefits, but seldom do they provide an opportunity to actually experience the service before purchasing. Hence, the customer must rely on WOM to make their purchase decision.

More recently, Berns and Arimond's (2009) findings on the influence of negative and positive WOM in the field of recreation, leisure, and tourism showed that in situations where consumers were exposed to WOM comments about the service had a greater impact on their purchasing decisions. What does this mean in recreation, leisure, and tourism? It means the organization should be

vigilant in identifying any service failure that leads to harsh negative WOM and take steps to correct it, especially for events such as truck and tractor pulling with many fans coming year after year (average years of attendance = 8.6). On the other hand, what about positive WOM? The results showed that if consumers see negative ratings in print and hear positive WOM comments, the positive WOM will have greater influence on their purchase decision. Large events, such as the truck and tractor pulls, whose services generated positive WOM will appreciate the benefit of this form of word of mouth.

## LIMITATIONS

Although this study provided insight into the truck and tractor pulling event experience, it would be important to further analyze the experience. More specific information could be gathered beyond the survey question "Other than the pull itself what else did you enjoy about this event?". Rewording or asking another question such as "What is your primary reason for attendance beyond the pull?" may not only gather valuable information, but also assist in the division and analysis of respondents in market segments based on their primary reason for attendance beyond the pull.

Several other challenges arose when administering the survey. Respondents were offered an incentive for completing the two-page survey; however, many attendees declined to complete the survey when they discovered more questions on a second page. Reducing the survey to one page may encourage more participation. This could be done by eliminating some questions, such as "What type of vehicle do you drive?", "What type of fuel does your vehicle use?", and "Do you purchase parts and supplies to maintain & repair your own vehicle?". These questions were intended to gather information to specifically market the event to certain sponsors, exhibitors, or vendors; yet, this may have inhibited participation in the survey.

Another challenge was that this self-administered survey may not be considered random, but instead a quota sample. In quota sampling, the researcher computed a minimum sample size to fulfill a specific quota corresponding to attendance at the tractor pull event by days and time. Once the quota was reached, no one else had a chance of being selected. Distributing the surveys at the ticket booth to randomly assigned ticket numbers would have allowed this

sample to be random. Also, this means of random distribution would enable attendees to complete the survey at their convenience as an alternative to being spontaneously approached by survey volunteers before, during, or after pull sessions. Lastly, researchers could also eliminate another limitation with this approach to distribution which was the difficulty of receiving coherent responses from attendees during or after the evening pulling session because they wanted to partake of the experience and not be bothered.

## CONCLUSION

As the researchers examined the recreation and leisure of attendees of one of the fastest growing motorsports today, research indicated that many fans desired an experience rather than just attending an event by staying overnight with groups of family and friends to visit local areas beyond the pull. More than just an event, truck and tractor pulling has evolved into a recreation experience, with fans spending a considerable amount of time and money engaging in other leisure activities beyond the pull. Many tractor pull "enthusiasts" traveled greater distances and spent more money experiencing the weekend event than other attendees. Because this experience is intangible, attendees often rely on positive and negative word of mouth about this experience from family and friends. This study and future research efforts on large recreation events will further assist professionals in the field of recreation, leisure, and tourism as they continue to understand the characteristics of successful event experiences and plan many more.

## REFERENCES

- About NTPA/WPI. (2008). Retrieved November 22, 2008 from, <http://www.ntpapull.com/aboutntpa.htm>
- Ashcroft, G. (1993). *A full pull: The sport of tractor pulling*. Ipswich, U.K.: Farming Press.
- Bargo, M. (1988). *Truck and tractor pulling*. Osceola, WI: Motorbooks International.
- Berns, G., & Arimond, G. (2009). *Word of mouth's affect on consumer's purchase of recreation services*. Manuscript submitted for publication.
- Brooker, G. (1984). An assessment of an expanded measure of perceived risk. *Advances in Consumer Research*, 11 (1), 439-441.
- Demographics. (2008). Retrieved November 22, 2008, from

- <http://www.ntpapull.com/demographics.htm>
- Environmental Systems Research Institute (ESRI) (2008). ArcGIS (Geographic Information System) (Version 9.3) [Computer software]. Redlands, CA: ESRI.
- Gordon, J. J., & Smith, P. F. (1988). The national tractor pulling championships: Changing patterns, 1970-1985. *The East Lake Geographer*, 23, 163-173.
- Grimm, R. (1988). *Truck and tractor pullers*. Mankato, MN: Crestwood House.
- Haywood, K.M. (1989). Managing word of mouth communications. *Journal of Services Marketing*, 3(2), 55-67.
- Henderson, K. A., & Bialeschki, M. D. (2002). *Evaluating leisure services: Making enlightened decisions*. State College, PA: Venture Publishing.
- Jacoby, J. and Kaplan, L.B. (1972). The components of perceived risk. Proceedings of the third annual conference, Association for Consumer Research, College Park, MD, 382-393.
- Lovelock, C. (1991). *Services Marketing*. Englewood Cliffs, NJ: Prentice-Hall.
- Monroe County Agricultural Society. (2002, October). *Demographic survey of NTPA Tomah Super National Tractor Pull*. Tomah, WI: Author.
- Murray, K.B. (1991). A test of services marketing theory: Consumer information acquisition activities. *Journal of Marketing*, 55(1), 10-25.
- NTPA advertising & marketing opportunities. (2008). Retrieved November 22, 2008 from, <http://www.ntpapull.com/advertisemarketing.htm>
- National Tractor Pullers Association. (2008). In *Wikipedia*. Retrieved November 22, 2008, from [http://en.wikipedia.org/wiki/National\\_Tractor\\_Pullers\\_Association](http://en.wikipedia.org/wiki/National_Tractor_Pullers_Association)
- Newhouse, G.C. (2005, Spring). Service marketing. *Impact*, 9(1), 9-10.
- RFD-TV. (2008). In *Wikipedia*. Retrieved November 22, 2008, from <http://en.wikipedia.org/wiki/RFD-TV>
- Roselius, T. (1971). Consumer rankings of risk reduction methods. *Journal of Marketing*. 35 (1), 56-61.
- Salant, P., & Dillman, D. A. (1994). *How to conduct your own survey*. New York: John Wiley & Sons.
- Savage, J. (2000). *Truck and tractor pullers*. Berkeley Heights, NJ: Enslow Publishers.
- Sponsor opportunities. (2008). Retrieved November 22, 2008 from, <http://www.ntpapull.com/sponsorship.htm>
- Van der Smissen, B., Moiseichik, M., Hartenburg, V.J., & Twardzik, L.F. (1999). *Management of park and recreation agencies*. Ashburn, VA: National Recreation and Park Association.
- Walker, C. (1995). Word-of-mouth. *American Demographics*, 17(7), 38-44.
- Webb, S. (2004). *Tractor pull!* St. Paul, MN: MBI Publishing.
- What is tractor pulling? (n.d.). Retrieved December 3, 2008, from <http://www.trecker-trecker-deutschland.de/google/whatis.htm>