



2017 Oklahoma Wildlife Expo Visitor Feedback: On-site & Online Surveys



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Table of Contents

List of Tables	iii
List of Figures	v
Acknowledgment	1
Introduction	2
Event Description	2
Attendance estimates.	2
On-site visitor surveys.	3
Pre and Post-Expo Online Surveys.	3
Results	4
Expo estimated attendance.	4
Friday: Visitor Survey	5
Prior attendance to the Wildlife Expo.	8
Fishing and hunting in the last year.	8
Wildlife Expo Organization.	9
Saturday and Sunday: Visitor Survey	10
Prior attendance to the Wildlife Expo.	14
Fishing and hunting in the last year.	15
Wildlife Expo Organization.	15
Weekend Demographics at the 2017 Wildlife Expo	16
Fishing and hunting.	17
Activities at the Wildlife Expo.	20
Oklahoma Academic Standards.	21
Wildlife Expo rating.	21
Summary of findings	22
On-site visitor surveys results	22
Pre-Expo Online School Survey	22
Post-Expo School Survey	22
Appendix A: On-site Survey	24
Appendix B: Pre-Expo School Online Survey	25
Appendix C: Post-Expo School Online Survey	27
Appendix D: IRB	29

List of Tables

Table 1: Frequency of Surveys by Location Friday3

Table 2: Frequency of Surveys by Location Sat & Sun3

Table 3: Attendance estimates for the 2017 Wildlife Expo.....4

Table 4: Total Estimated Attendance at the Wildlife Expo by Year4

Table 5: Demographics of Friday Visitors Who Completed a Survey5

Table 6: Zip codes for Friday’s Visitors.....7

Table 7: Number of Adults and Youth/Children per Vehicle.....8

Table 8: Demographics of Saturday and Sunday Visitors Who Completed a Survey.....11

Table 9: Zip Codes for Saturday and Sunday Visitors12

Table 10: Number of Saturday and Sunday Adults and Children per Vehicle.....13

Table 11: Wildlife Expo Weekend Demographics vs. Oklahoma Demographics (2017).....16

Table 12: Class Representation: Pre-Expo online School Survey17

Table 13: Wildlife Expo School Attendance Through Post-Expo Surveys.....19

Table 14: Class Representation: Post-Expo Online Survey.....19

Table 15: Summary of classes’ favorite Activities.....20

List of Figures

Figure 1: Lazy-E Arena Map	3
Figure 2 OK Resident Distribution: Friday Survey	6
Figure 3 Prior attendance to the Wildlife Expo:Friday	8
Figure 4 Fished and Hunted in the past year: Friday	9
Figure 5 Wildlife Expo Organization: Friday	9
Figure 6 Overall Wildlife Expo Satisfaction: Friday	10
Figure 7 OK Resident Distribution Saturday and Sunday Survey	13
Figure 8 Prior Attendance to the Wildlife Expo:Sat & Sun.....	14
Figure 9 Increasing trend of returns	14
Figure 10 Fished and hunted last year: Sat & Sun.....	15
Figure 11 Wildlife Expo Organization: Sat & sun.....	15
figure 12 Saturday and Sunday overall satisfaction.....	16
Figure 13 Classes Teaching Wildlife Conservation.....	17
Figure 14. Prior experience with fishing and hunting related activities information. Left: Student hunting information, Right: Student fishing information.....	18
Figure 15 Class' favorite activities	19
Figure 16. Post-Expo fishing and other activities information. Left: Student fishing information, Right: Student other activities information.....	20
Figure 17: Rating of the 2017 Wildlife Expo	21

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Sincerely,
Catalina Palacios, Ph.D.
Co-Principal Investigator

2017 Oklahoma Wildlife Expo Visitor Feedback Survey

Introduction

The Oklahoma Department of Wildlife Conservation (ODWC) hosted the twelfth annual Oklahoma Wildlife Expo on September 22-24, 2017. The event was held at the Lazy-E Arena in Guthrie, Oklahoma and attracted visitors from across the state and beyond. The Wildlife Expo featured outdoor recreational and educational opportunities for the whole family with more than 100 activities, displays, and seminars, including shotgun shooting, rock climbing, archery, wildlife management, mountain biking, fishing, ATV riding, wildlife watching, hunting, etc. The following report has been prepared based on visitor feedback through on-site and online surveys conducted to better understand constituents served by the Wildlife Expo.

Event Description

The 2017 Wildlife Expo hosted by the Oklahoma Department of Wildlife Conservation (ODWC) happened on Friday, September 22 through Sunday, September 24. As has been traditional for the Wildlife Expo, the Friday schedule was designed with a preference for school groups, while the Saturday and Sunday schedule was open to the public. The Lazy-E Arena hosted the Wildlife Expo along Interstate Highway 35 north of Oklahoma City, between Edmond and Guthrie.

The Leisure Studies program at Oklahoma State University (OSU) - Stillwater entered an agreement with ODWC to prepare and implement an assessment of public perception of the program. Researchers provided both a pre-expo and post-expo online survey links through a Qualtrics website for the schools that attended the program.



Darrin Hill

Attendance estimates. Precise attendance at the 2017 Wildlife Expo was unknown, as tickets were not issued and an exact count of each was impractical. Attendance was estimated by multiplying the number of vehicles entering the Lazy-E grounds by an average number of passengers per vehicle. To find the average number of passengers per vehicle each day, data from the OSU visitor surveys (Appendix A) were used. In addition, on Friday, a known number of buses entered from Post Road. Most were large buses with a 65-person capacity, but some smaller buses and large commercial vans were also present. The average number of passengers per bus was estimated to be 45. Volunteer, exhibitor, vendor, Lazy-E Arena staff and concessionaire vehicles were included, accounting for approximately 1,500 – 2,000 individuals each day. Vehicle traffic was estimated using vehicle counters and counts were included between 6:00 a.m. and 6:00 p.m. on Friday, September 22; 7:00 a.m. to 7:00 p.m. on Saturday, September 23; and from 7:00 a.m. to 6:00 p.m. on Sunday September 24, 2017.

On-site visitor surveys. OSU student surveyors moved around to various areas in Lazy E Arena and approached adult visitors (18 years old and above) on a first available basis to request an interview. For the first time ever, Wildlife Expo visitors who completed the survey were given an ODWC fish bobber to thank them for their participation while supplies lasted. On Friday, five volunteer surveyors conducted interviews between 12:20 p.m. and 5:10 p.m. A total of 103 surveys were completed by visitors in different locations (Table 1). Saturday and Sunday data was collected between 10:00 a.m. and 5:00 p.m. with anywhere from 3-6 volunteer data collectors. A total of 546 surveys were completed during Saturday and Sunday in different locations (Table 2). The majority of the data was collected in the arena during the three days (Figure 1). Principal investigators collected data sporadically as well, depending on the tasks that needed to be done. The Oklahoma State University Institutional Review Board (IRB) approved all of the surveys and research protocols for the protection of human subjects (Appendix D).

Pre and Post-Expo Online Surveys. Two weeks before the Wildlife Expo (September 7), educators who had registered for the 2017 Wildlife Expo School Day were sent an email with a link to an online pre-Expo survey (Appendix B). The day after the Wildlife Expo (September 25) a link was sent to the same school with a post-Expo survey (Appendix C). They were given two weeks to complete the online survey.

Frequency of Surveys by Location Friday

	Freq.	Percent
Arena	70	68
Red Loop	3	3
Green Loop	10	10
Blue Loop	17	16
Yellow Loop	3	3
Total Friday	103	100.0

TABLE 1: FREQUENCY OF SURVEYS BY LOCATION FRIDAY

Frequency of Surveys by Location Saturday & Sunday

	Freq.	Percent
Arena	310	56.8
Red Loop	53	9.7
Green Loop	97	17.8
Blue Loop	43	7.8
Yellow Loop	41	7.5
No response	2	0.4
Total Sat&Sun	546	100.0

TABLE 2: FREQUENCY OF SURVEYS BY LOCATION SAT & SUN



FIGURE 1: LAZY-E ARENA MAP

Results

Expo estimated attendance.

The estimated attendance was 6% percent higher than in 2016 (Table 3 and 4). The overall increase may be attributed to a significantly higher attendance of School Day on Friday plus favorable weather.

Attendance pattern for Saturday was lower than previous year, while attendance for Sunday was slightly higher than 2016 (Table 3).

	2016	2017	Change from 2016
Friday			
Total Visitors on Friday	15,373	19,607	28% increase
Saturday			
Total Visitors on Saturday	16,907	15,218	10% decrease
Sunday			
Total Visitors on Sunday	11,165	11,228	1% increase
Grand Total:	43,445	46,053	6% increase

TABLE 3: ATTENDANCE ESTIMATES FOR THE 2017 WILDLIFE EXPO

Total Estimated Attendance at the Wildlife Expo by Year

Year	Estimated Attendance
2017	46,053
2016	43,445
2015	50,394
2014	45,083
2012	41,700
2011	59,195
2010	51,293
2009	41,991
2008	38,615
2007	37,530
2006	35,000
2005	45,000

TABLE 4: TOTAL ESTIMATED ATTENDANCE AT THE WILDLIFE EXPO BY YEAR



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Friday: Visitor Survey

Surveyors would record the time of the interview and ask the participants (18 years old and above) when they had arrived at the 2017 Wildlife Expo to determine how long they had experienced the Wildlife Expo before answering the survey. Time spent at the Wildlife Expo before responding to the survey ranged from just arrived to being there for eight hours with an average time of four hours.

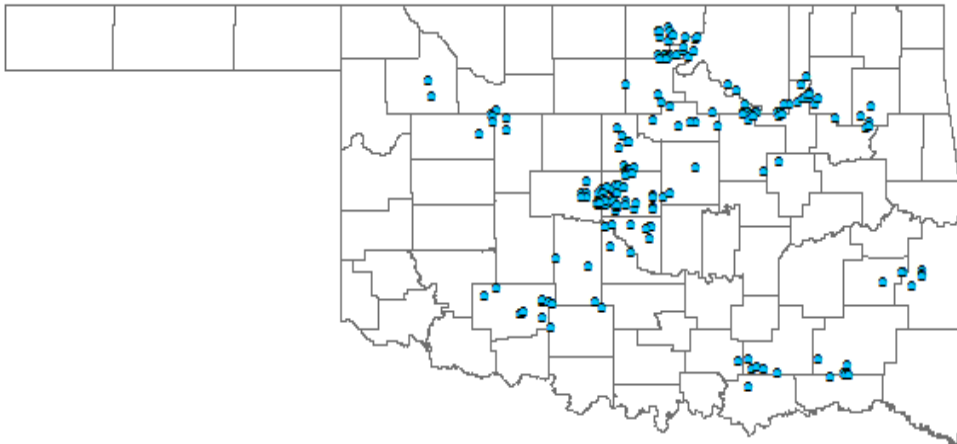
In 2017, visitor surveys were completed with 103 respondents on Friday. The majority of visitors were White (77%) not Hispanic or Latino (87%) followed by American Indian or Alaska Native (7%), Bi-racial or multi-racial (5%), and Black or African American (4%). About 8% of respondents identified their ethnicity as Hispanic or Latino. Most of the surveyed visitors were female (64%). The average age of respondents was 43.5 years old, and 36-year olds were most prevalent in the sample. The age of respondents ranged from 24 to 67 years (Table 5).

Demographics of Friday Visitors Who Completed a Survey 2017

Demographics	Friday	
	Frequency	Percentage
<i>Age</i>	Mean	43.5
	Median	41
	Mode	36
	Range	24-67
<i>Gender</i>	Male	36 35%
	Female	66 64%
	No Response	1 1%
<i>Race</i>	White	80 77%
	Black or African American	4 4%
	Bi-racial or multi-racial	5 5%
	American Indian or Alaska Native	7 7%
	No response	7 7%
<i>Ethnicity</i>	Hispanic or Latino	8 8%
	Not Hispanic or Latino	90 87%
	No Response	5 5%

TABLE 5: DEMOGRAPHICS OF FRIDAY VISITORS WHO COMPLETED A SURVEY

Friday visitors to the 2017 Wildlife Expo came from across the state of Oklahoma. Almost all of the survey participants (98%) reported they live in Oklahoma (N=103). Participants were asked to provide their "Home Zip Code". A review of the home zip codes for those in attendance at 2017 Wildlife Expo revealed that the majority of Friday visitors came from the Oklahoma City area (20.39%) and nearby cities (31.07%). This high number was expected given the larger population base and reasonable proximity to the Wildlife Expo location for those in the central part of the state. Figure 2 shows the points of origin for the major visitation groups at the 2017 Wildlife Expo on Friday September 22nd.



Map provided by Corey Jager

FIGURE 2 OK RESIDENT DISTRIBUTION: FRIDAY SURVEY

Table 6 provides the detail on ZIP codes reported by respondents to the survey. Using these data, it was possible to identify the approximate percentage of guests at the 2017 Wildlife Expo coming from different communities across the state. The majority of Friday visitors came from



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Oklahoma City and nearby cities. Only 2 people mentioned ZIP codes from other states, Texas and Arizona. It is assumed that these visitors were visiting Oklahoma and did not travel across the country to just attend the 2017 Wildlife Expo.

Zip codes for Friday's Visitors

Zip Code	Number of Respondents	Valid Percentage	Represented Cities
730--	32	31.07%	Arcadia, Bethany, Blanchard, Chickasha, Choctaw, Cole, Crescent, Cimarron City, Dougherty, Edmond, El Reno, Guthrie, Norge, Pauls Valley, Piedmont, Purcell, Wayne, Woodlawn Park, Yukon
731--	21	20.39%	Oklahoma City
734--	1	0.97%	Coleman
735--	7	6.80%	Lawton, Duncan
737-	2	1.94%	Canton, Longdale
738--	2	1.94%	Mooreland, Mutual
740--	14	13.59%	Bartlesville, Broken Arrow, Cushing, Drumright, Jennings, Owasso, Pawnee, Perkins, Stillwater,
741--	3	2.91%	Tulsa
743--	1	0.97%	Chouteau
744--	1	0.97%	Beggs
745--	4	3.88%	Antlers, Caney
746--	8	7.77%	Ponca City
747--	1	0.97%	Caddo
748--	3	2.91%	Chandler, Norman
749--	1	0.97%	Wister
75092	1	0.97%	Grayson County, TX
85024	1	0.97%	Phoenix, AZ
Total	103	100%	

TABLE 6: ZIP CODES FOR FRIDAY'S VISITORS

Only Friday visitors were asked the question: "Did you personally arrive on a bus with your group today?". According to their responses, only 23% of visitors arrived on a bus with their group, while the majority (77%) of Friday visitors did not.

The next two questions were used to have an understanding of the number of adult visitors and youth/children that came in the respondents' vehicles on Friday. Among the visitors who responded to these two questions, 42% of visitors had one adult in their vehicle, and 30% of visitors reported that there were no youth/children in their vehicle (Table 7). It should be noted, that respondents who indicated that they came with "five or more children" in their vehicle might have arrived on a bus.

Number of Adults and Children per Vehicle

Number	0	1	2	3	4	5	6+	Missing	Total
Adults	-	43	26	5	2	2	-	25	78
Total		43	52	15	8	10			128
%		(42%)	(25%)	(5%)	(2%)	(2%)		(24%)	100%
Children	31	9	11	10	11	6	-	25	103
Total	0	9	22	30	44	30+			135+
%	(30%)	(9%)	(11%)	(10%)	(11%)	(5%)		(24%)	100%

TABLE 7: NUMBER OF ADULTS AND YOUTH/CHILDREN PER VEHICLE

Prior attendance to the Wildlife Expo. Most of Friday respondents (54%) were repeat visitors to the Wildlife Expo. More than half of survey respondents (56 out of 103 individuals) have attended the Wildlife Expo before this year. About 46% of respondents were first-time visitors (Figure 3).

Fishing and hunting in the last year. Friday visitors were asked if they had gone fishing and/or hunting in the previous year. Sixty-one percent of the respondents (n = 63) said they did go fishing last year. On the other end of the spectrum 71% of the respondents (n=73) stated that they had not gone hunting in this past year (Figure 4).

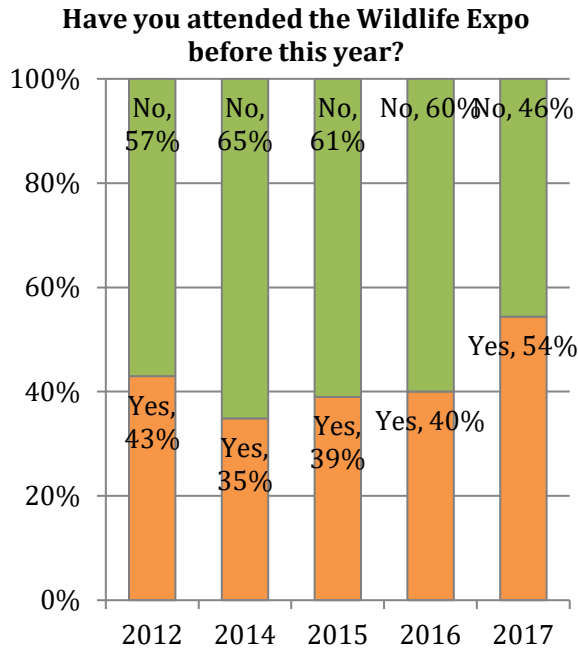


FIGURE 3 PRIOR ATTENDANCE TO THE WILDLIFE EXPO:FRIDAY

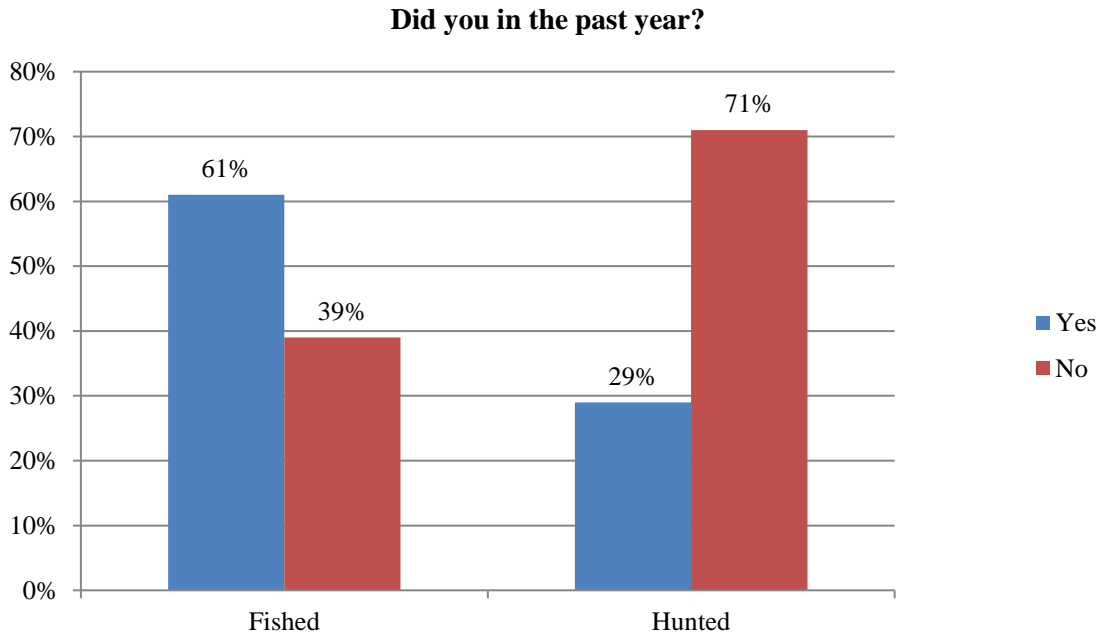


FIGURE 4 FISHED AND HUNTED IN THE PAST YEAR: FRIDAY

Wildlife Expo Organization. Wildlife Expo participants were asked if they know who organizes and operates the Wildlife Expo, they were given three options: ODWC, Lazy E. Arena, and Other. The vast majority (82.5%) of Friday’s respondents identified the Oklahoma Department of Wildlife Conservation (ODWC) as the entity that organizes and operates the Wildlife Expo. Only 1% of participants did not provide a response to this question (Figure 5).

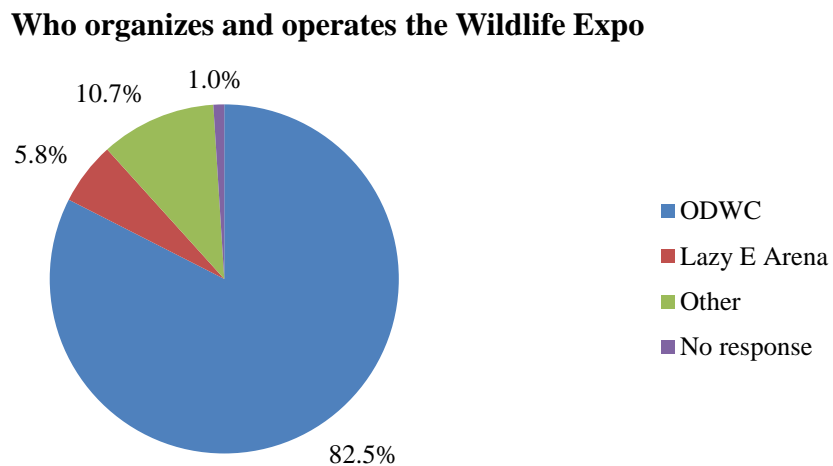


FIGURE 5 WILDLIFE EXPO ORGANIZATION: FRIDAY

Respondents were asked to rate their overall experience at the Wildlife Expo on a five-point scale from 1 (Very Dissatisfied) to 5 (Very Satisfied). The majority of Friday’s respondents rated their overall experience at the Wildlife Expo positively with "Satisfied" (25%) and “Very

Satisfied” (74%). No one rated their experience as either “Dissatisfied” or “Very Dissatisfied” (Figure 6).

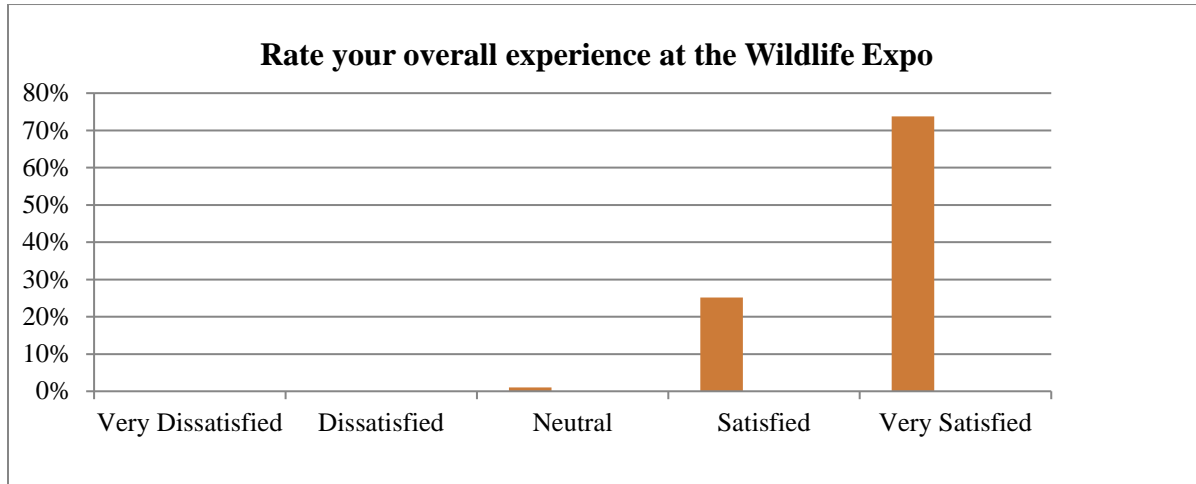


FIGURE 6 OVERALL WILDLIFE EXPO SATISFACTION: FRIDAY

Saturday and Sunday: Visitor Survey

The weekend assessment consisted of visitor survey of adult visitors (18 years old and above) participating in the 2017 Wildlife Expo. Surveyors would record the time of the interview and ask the participants when they had arrived at the Wildlife Expo to determine how long they had experienced the Wildlife Expo before answering the survey. Time spent at the Wildlife Expo before responding to the survey ranged from just arrived to 6 hours with an average time of 2 hours.

A total number of 546 respondents participated in the 2017 Wildlife Expo Saturday and Sunday visitor survey. Although some of the research participants did not complete the entire survey, all the respondents were included in the data analysis and report. Therefore, the numbers of missing data may vary from question to question.

The vast majority of Saturday and Sunday visitors who completed the survey were White (82%) not Hispanic or Latino (95%) followed by American Indian or Alaska Native (7%), Bi-racial or multi-racial (4%), Black or African American (2%), Asian (1%). Only 3% of respondents identified their ethnicity as Hispanic or Latino. Most of the surveyed visitors were female (51%). The average age of respondents was 41.9 years old, and 35-year old was the most frequent age. The age of respondents ranged from 18 to 77 years (Table 8).

Demographics of Saturday and Sunday Visitors Who Completed a Survey

Demographics	Saturday & Sunday	
	Frequency	Percentage
<i>Age</i>	Mean	41.9
	Median	39
	Mode	35
	Range	18-77
<i>Gender</i>	Male	248 46%
	Female	280 51%
	No Response	18 3%
<i>Race</i>	White	444 82%
	Black or African American	10 2%
	Bi-racial or multi-racial	24 4%
	American Indian or Alaska Native	38 7%
	Asian	6 1%
	No response	24 4%
	Hispanic or Latino	16 3%
<i>Ethnicity</i>	Not Hispanic or Latino	521 95%
	No Response	9 2%

TABLE 8: DEMOGRAPHICS OF SATURDAY AND SUNDAY VISITORS WHO COMPLETED A SURVEY

Table 9 on the following page provides the detail on zip codes reported by respondents to the on-site survey. The number of interviewees from each zip code is indicated, as is the percentage of the total response to the survey. As a result, it is possible to identify the approximate percentage of visitors from different regions within the state of Oklahoma, other states and beyond.

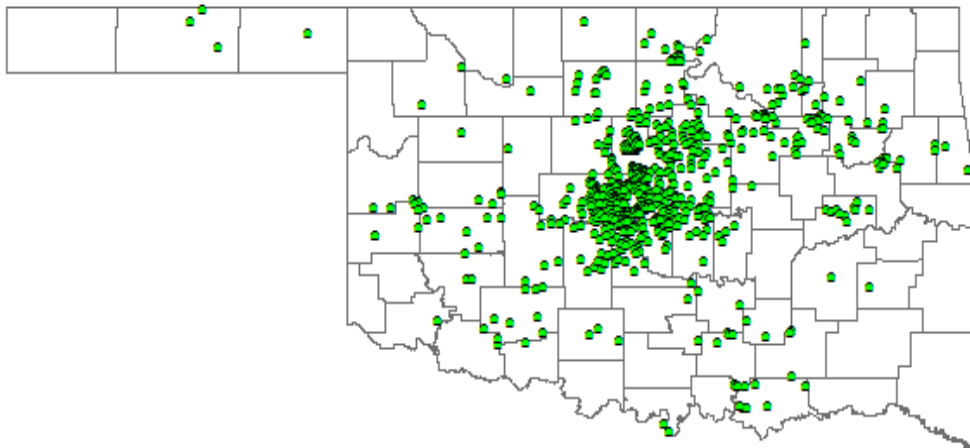


Weekend visitors to the 2017 Wildlife Expo came from across the state of Oklahoma and five other states: Arkansas, Texas, Florida, Missouri, and Ohio (Figure 7). The majority of the on-site survey participants reported they lived in Oklahoma (97.3%). Only 4 individuals provided international zip codes.

Zip Codes for Saturday and Sunday Visitors

Zip Code	Number of Respondents	Valid Percentage	Represented Cities
730--	265	48.53%	Arcadia, Bethany, Blanchard, Chickasha, Choctaw, Cole, Crescent, Cimarron City, Dougherty, Edmond, El Reno, Guthrie, Norge, Pauls Valley, Piedmont, Purcell, Wayne, Woodlawn Park, Yukon
731--	100	18.31%	Oklahoma City
734--	1	0.18%	Thackerville
735--	10	1.83%	Lawton, Elgin
736-	8	1.46%	Leedy
737-	16	2.93%	Kingfisher
738--	2	0.37%	Camargo
739--	4	0.73%	Beaver, Optima
740--	40	7.33%	Bartlesville, Cushing, Drumright, Jennings, Perkins, Stillwater
741--	8	1.46%	Tulsa
743--	1	0.18%	Chouteau
744--	8	1.46%	Haskell
745--	4	0.73%	Caney, Coalgate, Krebs, Wilburton
746--	6	1.10%	Ponca City
747--	6	1.10%	Bennington, Calera, Durant
748--	50	9.16%	Bethel Acres, Johnson, Shawnee
749--	2	0.37%	Fanshawe, Octavia, Smithville
750--	3	0.55%	Garland, TX
32819	2	0.37%	Orange County, FL
45373	1	0.18%	Miami County, OH
64850	1	0.18%	Neosho, MO
72099	1	0.18%	Jacksonville, AR
72712	2	0.37%	Benton County, AR
79045	1	0.18%	Hereford, TX
70713	1	0.18%	
93078	1	0.18%	International
73286	2	0.37%	
Total	546	100%	

TABLE 9: ZIP CODES FOR SATURDAY AND SUNDAY VISITORS



Map Provided by Corey Jager

FIGURE 7 OK RESIDENT DISTRIBUTION SATURDAY AND SUNDAY SURVEY

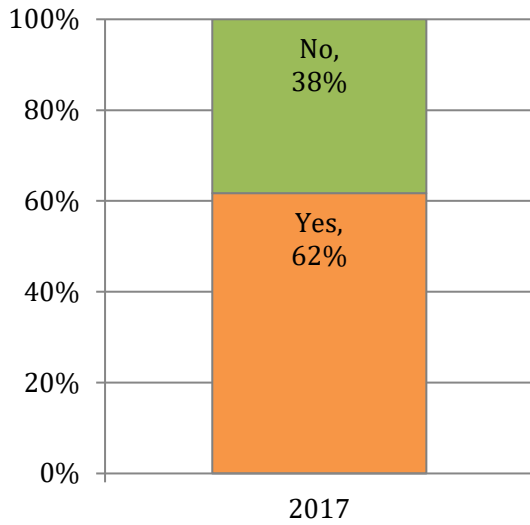
The next two questions were used to have an understanding of the number of visitors including adult and youth/children that came in the respondents’ vehicles on Saturday and Sunday. Among the visitors who responded to these two questions, 54% of visitors had two adults in their vehicle, and only 16% of visitors reported that there were no youth/children in their vehicle. The majority of visitors (35%), however, indicated they had two children in their vehicle (Table 10).

Number of Saturday and Sunday Adults and Children per Vehicle

Number	0	1	2	3	4	5	6	Missing	Total
Adults	-	121	296	75	40	9	5	0	546
Total		121	592	225	160	45	30		1173
%		(22%)	(54%)	(14%)	(7%)	(2%)	(1%)		100%
Children	89	106	189	92	42	28	-	0	546
Total	0	106	378	276	168	140+			1068+
%	(16%)	(19%)	(35%)	(17%)	(8%)	(5%)			100%

TABLE 10: NUMBER OF SATURDAY AND SUNDAY ADULTS AND CHILDREN PER VEHICLE

Have you attended the Wildlife Expo before this year?



Prior attendance to the Wildlife Expo. The majority (62%) of Saturday and Sunday respondents have attended the Wildlife Expo before this year. Only 38% of respondents were first-time visitors (Figure 8).

As shown in Figure 9, there has been an increasing number of return weekend visitors to the Wildlife expo in the last years. The 2017 Wildlife Expo reported the highest percentage of return weekend visitors (62%) in the past nine years (Figure 9).

FIGURE 8 PRIOR ATTENDANCE TO THE WILDLIFE EXPO:SAT & SUN

First year of attendance at the Wildlife Expo

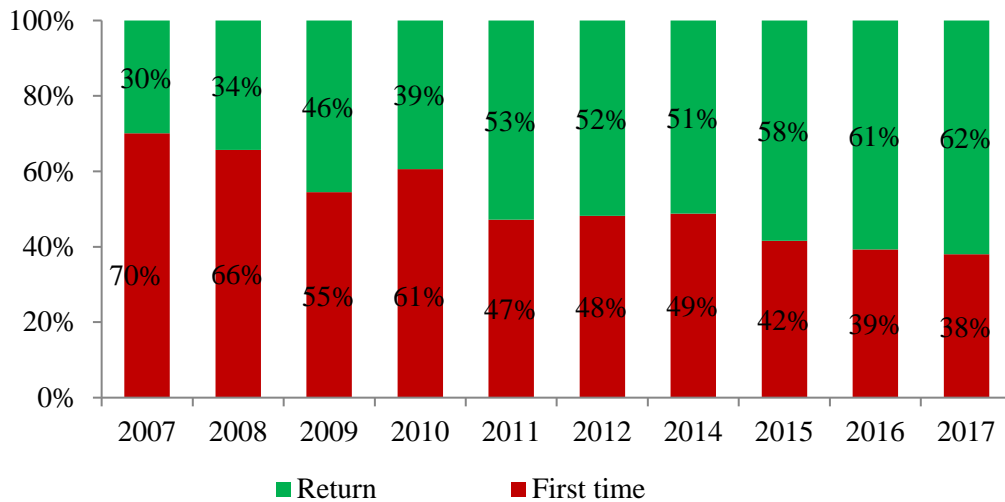


FIGURE 9 INCREASING TREND OF RETURNS

Fishing and hunting in the last year. Saturday and Sunday visitors to the Wildlife Expo were asked if they had gone fishing and/or hunting in the previous year. Seventy-four percent of the respondents (n = 403) said they did go fishing last year. On the other end of the spectrum 59% of the respondents (n=322) stated that they had not gone hunting in this past year (Figure 10).

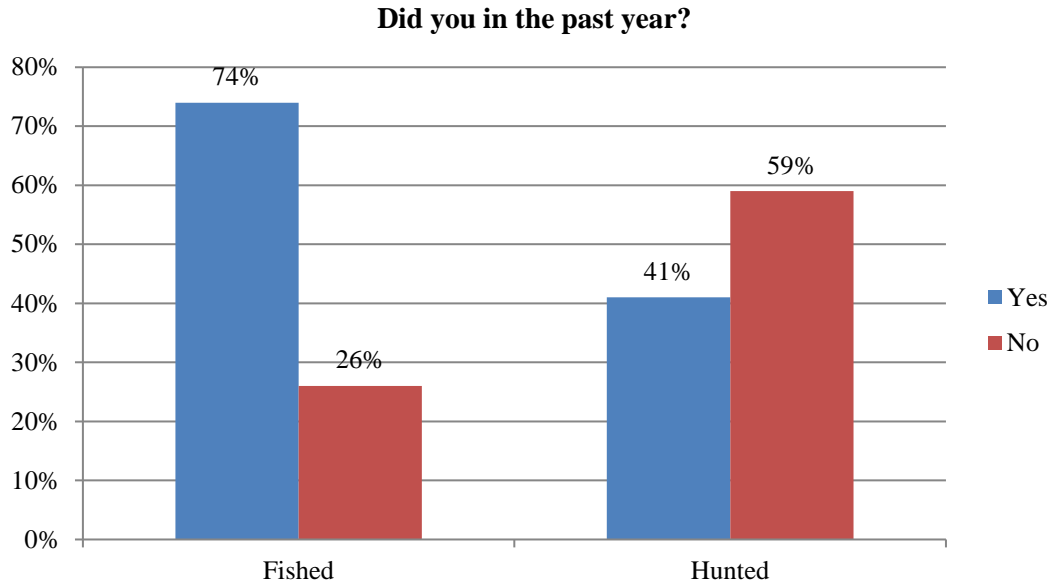


FIGURE 10 FISHED AND HUNTED LAST YEAR: SAT & SUN

Wildlife Expo Organization. Saturday and Sunday visitors were also asked, “Who organizes and operates the Wildlife Expo”. The majority (75%) of Saturday and Sunday’s respondents identified the Oklahoma Department of Wildlife Conservation (ODWC) as the entity that organizes and operates the Wildlife Expo. Less than 2% of visitors did not provide a response (Figure 11).

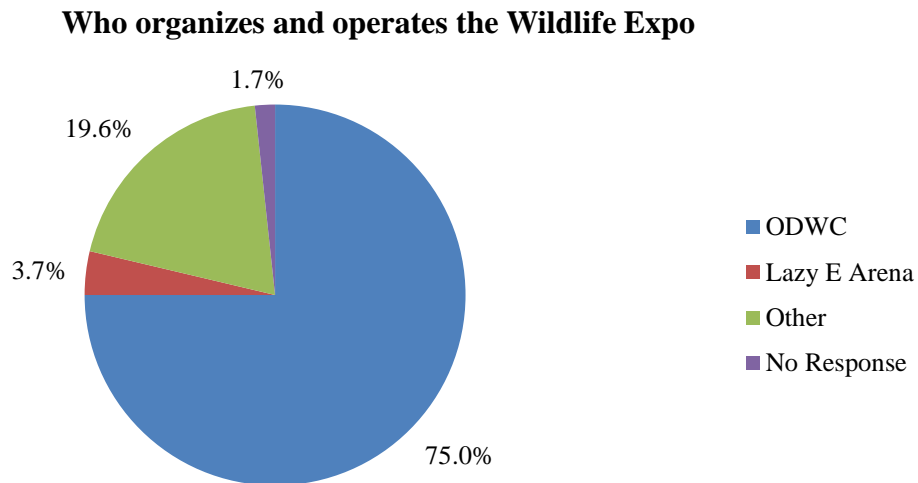


FIGURE 11 WILDLIFE EXPO ORGANIZATION: SAT & SUN

Saturday and Sunday visitors were asked to rate their overall experience at the Wildlife Expo on a five-point scale from 1 (Very Dissatisfied) to 5 (Very Satisfied). The majority of respondents rated their overall experience as highly satisfactory with "Satisfied" (11.40%) and "Very Satisfied" (85%). Although minimum, it should be noted, however, that 4 out of 546 Saturday and Sunday respondents rated their overall experience at the Wildlife Expo as "Very Dissatisfied" (Figure 12). The main reasons reported by respondents for their low rating were regarding the Wildlife Expo facilities, including bathrooms and seating areas, lack of food vendor choices, and missing the kayaking area from previous years.

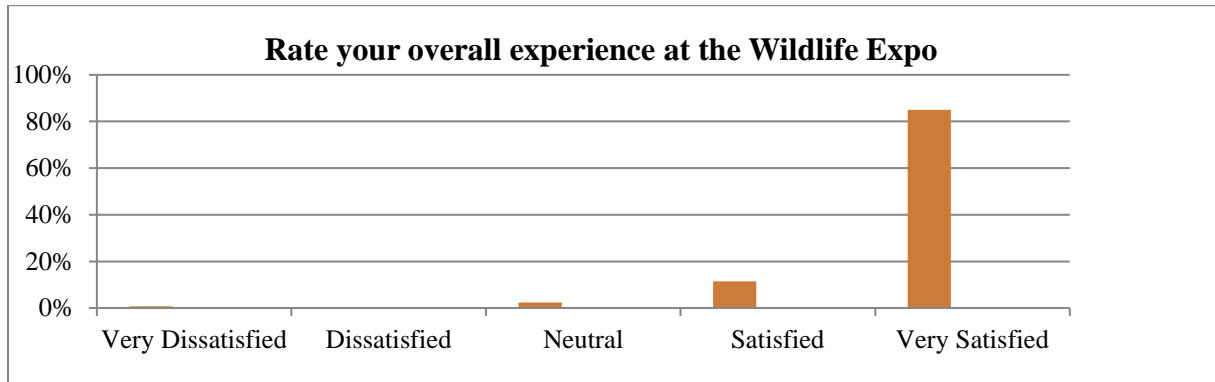


FIGURE 12 SATURDAY AND SUNDAY OVERALL SATISFACTION

Weekend Demographics at the 2017 Wildlife Expo

The overall demographics collected at the 2017 Wildlife Expo during Saturday and Sunday had some differences to the demographics of the Oklahoma population (U. S. Bureau of Census). Black, Bi-racial or Multi-racial, and Hispanic or Latino had a significant underrepresentation of Wildlife Expo participants (Table 11).

2017 Wildlife Expo Weekend Demographics

	US Census for Oklahoma	Wildlife Expo 2017
Male	49.5%	46%
Female	50.5%	51%
White	74.8%	82%
Black	7.8%	2%
Bi-racial or multi-racial	6.1%	4%
American Indian or Alaska Native	9.2%	7%
Asian	2.2%	1%
Hispanic or Latino	10.3%	3%
Not Hispanic or Latino	66.2%	95%

TABLE 11: WILDLIFE EXPO WEEKEND DEMOGRAPHICS VS. OKLAHOMA DEMOGRAPHICS (2016)

Pre-Expo Online School Survey.

Pre-Expo online school surveys were designed for the teacher or school representative to collect the data from classes in general without identifying any specific student. From their data

collection, they could fill out an online survey (Appendix B) through a Qualtrics link. Two weeks before attending the 2017 Wildlife Expo School Day a pre-Expo online survey link was sent to registered classes to fill out as a group. A total 146 classes from 40 different schools completed the online survey. Thirteen of the 40 different schools were part of a homeschool program.

A total of 146 classes were reported in the Pre-Expo Online School Survey representing students from the first to the twelfth grade. The eighth grade was the most frequent class stated in the Pre-Expo Online survey, followed by the seventh grade and the tenth grade. The least represented classes were eleventh, and twelfth grades (Table 12).

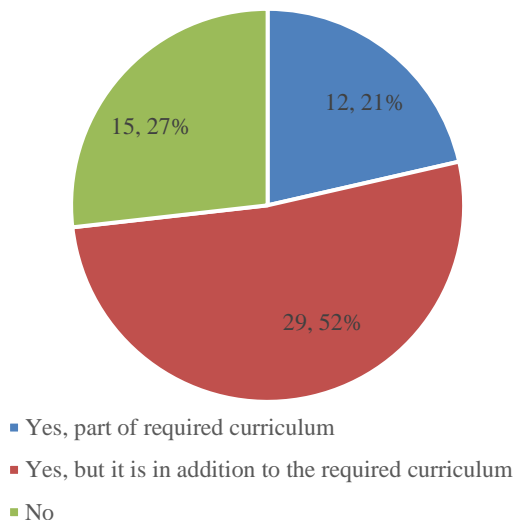
Class Representation: Pre-Expo Online School Survey

Grade	Frequency	Percentage	Grade	Frequency	Percentage
1	10	6.8	7	14	9.6
2	10	6.8	8	19	13.0
3	13	8.9	9	8	5.5
4	17	11.6	10	11	7.5
5	16	11.0	11	7	4.8
6	15	10.3	12	6	4.1
Totals			146	100.00	

TABLE 12: CLASS REPRESENTATION: PRE-EXPO ONLINE SCHOOL SURVEY

School representatives were asked the question: "How many students are in this class or classes?". According to the responses provided, about 1690 students were in the classes and participated in the survey in some way. The class sizes ranged from one student to 100 students with an average class size of 31 students. It is believed the high number of students within a class or classes reported by the teachers was representing multiple classes or the school as a whole. Teachers were also asked if they teach wildlife conservation in their classes. More than half (52%) of the teachers reported that they teach wildlife conservation in addition to their required curriculum. Only twelve of the classes expressed that wildlife conservation was part of their state-required curriculum standards (Figure 13).

Teaching wildlife conservation in class



Fishing and hunting. Pre-Expo Online School Surveys revealed that a significant number of students ($n=874$) reported that they have gone fishing before (Figure 14). From a total of 56 responses provided, an average of 19 students in class have gone fishing before. This ranged from one class reporting zero students to one class reporting 100 students have gone fishing before.

Teachers reported that a total of 725 students have caught a fish before (Figure 14). Students reporting catching a fish before ranged from zero students in two

FIGURE 13 CLASSES TEACHING WILDLIFE CONSERVATION

classes to 77 students in one class. An average of 16 students in class have caught a fish before. About 913 students reported they have family members that fish (Figure 14) with an average of 20 students per class. The students that had family members that fish ranged from one class reporting zero members that fish to one class reporting 100 students have family members that fish

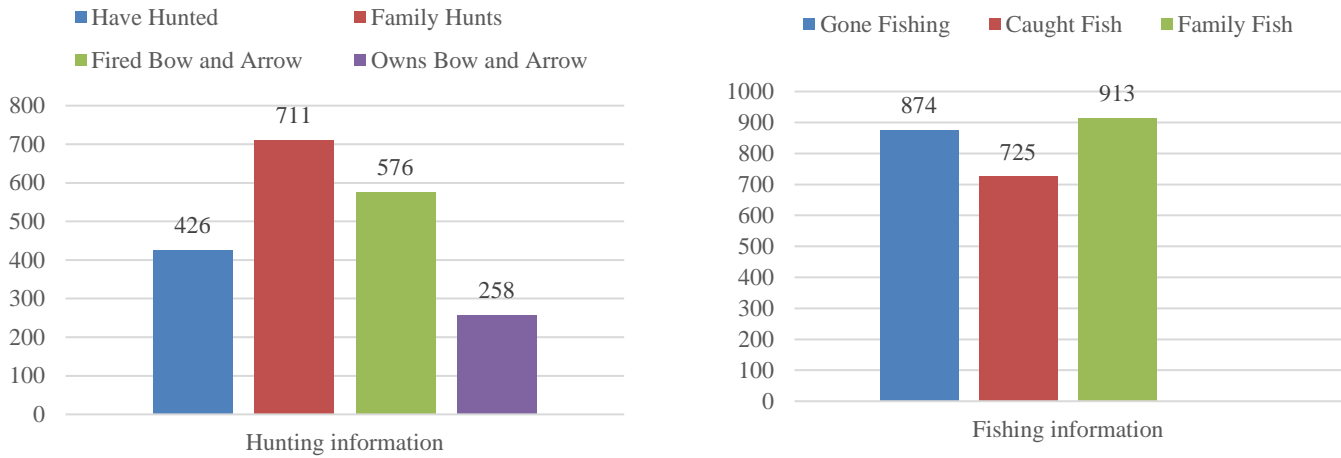


FIGURE 14. PRIOR EXPERIENCE WITH FISHING AND HUNTING RELATED ACTIVITIES INFORMATION. LEFT: STUDENT HUNTING INFORMATION, RIGHT: STUDENT FISHING INFORMATION

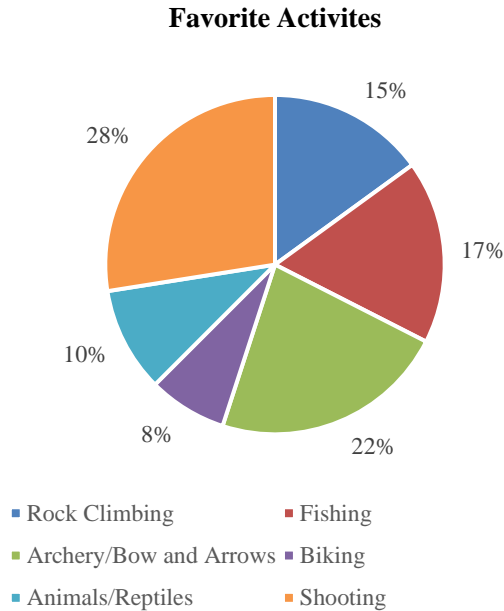
Pre-Expo Online School Surveys revealed the number of students that have gone hunting before ($n=426$) is about a half of the number of students who have gone fishing before ($n=874$) (Figure 14). Nine students on average have gone hunting before. This ranged from 17 classes reporting zero students to one class reporting 52 students have gone hunting before. The number of students that have family members that hunt equaled 711 (Figure 14), with an average of 16 students in class. This ranged from 9 classes reporting zero students to one class reporting 82 students have family members that hunt.

About 576 students indicated they have fired a bow and arrow before (Figure 14), with an average of 13 students per class. Students that have fired a bow and arrow before ranged from six classes reporting zero to one class reporting that 81 students have shot a bow and arrow before. In contrast, the number of students who own their own bow and arrow equipment ($n=258$) was less than half and had an average of 6 students in class (Figure 14). The number of students that own bow and arrow equipment ranged from 15 classes reporting zero students to one class reporting 43 students.

Post-Expo Online School Survey.

The day after (September 25, 2017), a link to an online post-Wildlife Expo survey (Appendix C) was sent to all the schools who registered for the Wildlife Expo. They were given two weeks to respond to the online survey. Thirty teachers completed the online post-Expo survey of registered school groups. According to the responses provided, the number of faculty that attended the Wildlife Expo representing each school ranged from 1 to 10 with a total of 127. The

number of none faculty (chaperones) that came to the Wildlife Expo was 113. The total number of students that attended the wildlife expo was 958 (Table 13). Teachers reported bringing an average of 32 students, three teachers and four chaperones with their group. Six of the 30 different schools were part of a homeschool program. The 30 surveys represented 78 different classes (Table 14).



Wildlife Expo School Attendance Through Post-Expo Surveys

	Total	Percentage
Student	958	80.0
Faculty	127	10.6
Chaperone (non-faculty)	113	9.4
Totals	1,198	100.00

TABLE 13: WILDLIFE EXPO SCHOOL ATTENDANCE THROUGH POST-EXPO SURVEYS

FIGURE 15 CLASS' FAVORITE ACTIVITIES

A total of 78 classes were reported in the Post-Expo Online School Survey representing students from the first to the twelfth grade. The eighth grade was the most frequent class stated with 13 classes being described. Tenth, eleventh, and twelfth had the least representation with only four classes each (Table 14).

Class Representation: Post-Expo Survey

Grade	Frequency	Percentage	Grade	Frequency	Percentage
1	6	7.7	7	9	11.5
2	6	7.7	8	13	16.7
3	5	6.4	9	5	6.4
4	5	6.4	10	4	5.1
5	8	10.3	11	4	5.1
6	9	11.5	12	4	5.1
			Totals	78	100.00

TABLE 14: CLASS REPRESENTATION: POST-EXPO ONLINE SURVEY

Teachers reported about 1079 students were in their classes and participated in the Post-Expo survey. The average class size was 35 students with a range of two classes containing two students to five classes containing 100 students. As in the Pre-Expo survey, the large class sizes may represent teachers who completed the survey representing multiple classes. Other schools were homeschools, which explain the lower end of the class sizes. The average class size that attended the Wildlife Expo was 32 students per class bringing 958 students to the Wildlife Expo.

Class' favorite activities at the Wildlife Expo. Students were asked to list their favorite activities at the Wildlife Expo. The highest listed favorite activity was shooting with 11 classes identifying the shotgun range and firearm exhibits as their favorites. This was followed by archery/bow and arrows (n=9), fishing (n=7), and rock climbing (n=6) listed as classes' most favorite activities at the 2107 Wildlife Expo (Figure 15, Table 15). A summary of all the mentioned favorite activities with frequencies provided by the Post-Expo online surveys is provided in Table 15.

Summary of Classes' Favorite Activities

Activity	Freq.	Activity	Freq.	Activity	Freq.
Shooting	11	Fishing/Simulator	7	Archery/Bow and Arrows	9
Rock climbing	6	ATV	2	Exhibits	2
Animals/Reptiles	4	Taste wild game	2	Everything	1
Biking	3	Indian yo-yo	1	Skeletons	1

TABLE 15: SUMMARY OF CLASSES' FAVORITE ACTIVITIES

Activities at the Wildlife Expo. Post-Expo Online School Surveys revealed that about 433 students reported they did something at the at the 2017 Wildlife Expo they have never done before (Figure 16). An average of 17 students per class reported trying something new at the Wildlife Expo. About 174 students reported shooting a firearm for the first time at the Wildlife Expo (Figure 16) with an average of 7 students per class. The number of students who reported firing a bow and arrow for the first time at the Wildlife Expo equaled 123 (Figure 16) with an average of 5 students per class.

About 227 students reported going fishing while at the Wildlife Expo (Figure 16) with 9 students in average per class. The number of students who fished for their first time at the Wildlife Expo equaled 66 (Figure 16) with an average of 3 students per class. Fifty-two students reported they caught their first fish at the Wildlife Expo (Figure 16) with an average of 2 students per class.

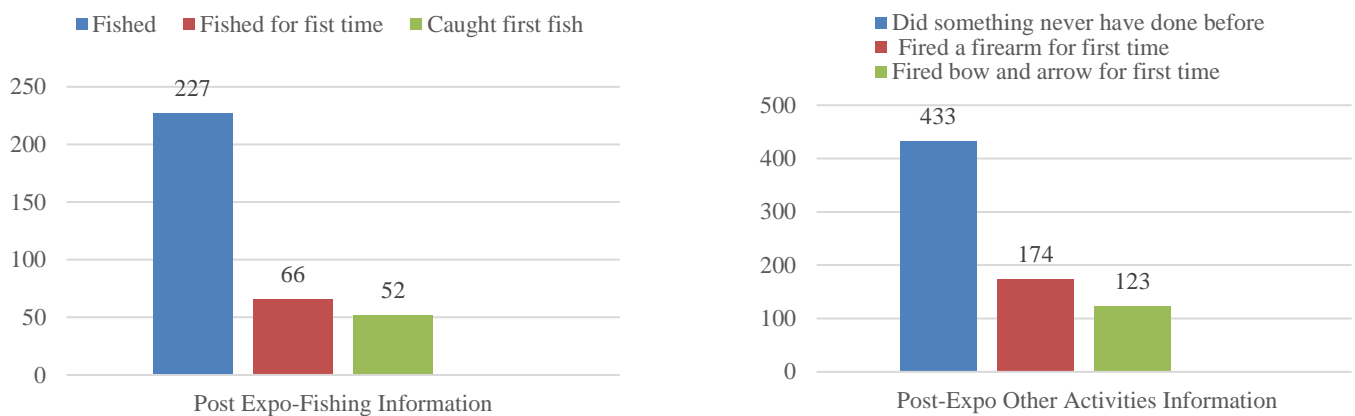


FIGURE 16. POST-EXPO FISHING AND OTHER ACTIVITIES INFORMATION. LEFT: STUDENT FISHING INFORMATION, RIGHT: STUDENT OTHER ACTIVITIES INFORMATION

Oklahoma Academic Standards. Teachers were asked to identify which Oklahoma academic standards the Wildlife Expo offered to their class. It should be noted that seventeen teachers provided no responses. The following are statements provided by the teachers in regards to identified Oklahoma academic standards in the post-expo online survey:

- The one I think that it covers would be the PE one for lifelong sports.
- Conservation
- Hands on experience with knowledgeable staff that went above and beyond to share their wisdom.
- HS LS2.8, LS4.4, LS4.5, LS3.2, LS3.3...pretty much all LS standards
- Map skills
- Obtaining, evaluating, and communicating information / Asking questions (for science) / describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death. /
- Reading a variety of texts
- S3.M2, S3.M5
- Social Studies
- Standards: MS-LS1-8, Ms-LS1-5, MS-LS1-4
- The standards are great and the opportunity for learning is tremendous. However the lines were so long and it was so crowded that it was impossible to see much before it was time to go.
- Various Biology, physical sciences standards
- Virtually all of them. There are so many different things available, that I really believe that most of the standards are present in some way.

Wildlife Expo rating. In the Post-Expo online survey teachers were asked to personally rate this year's Wildlife Expo on a five-point scale from 1 (Terrible) to 5 (Excellent). Twenty-one of the 30 surveys reported the Wildlife Expo was excellent (70%), seven reported good (23.3%), one rated as average (3.3%), and one said poor (3.3%) (Figure 17). The class in a whole also rated this year's Wildlife Expo. Only 28 surveys provided responses to this question. Seventeen of the surveys reported the Wildlife Expo was excellent (60.71%), ten reported good (35.71%), and one said poor (3.57%) (Figure 17).

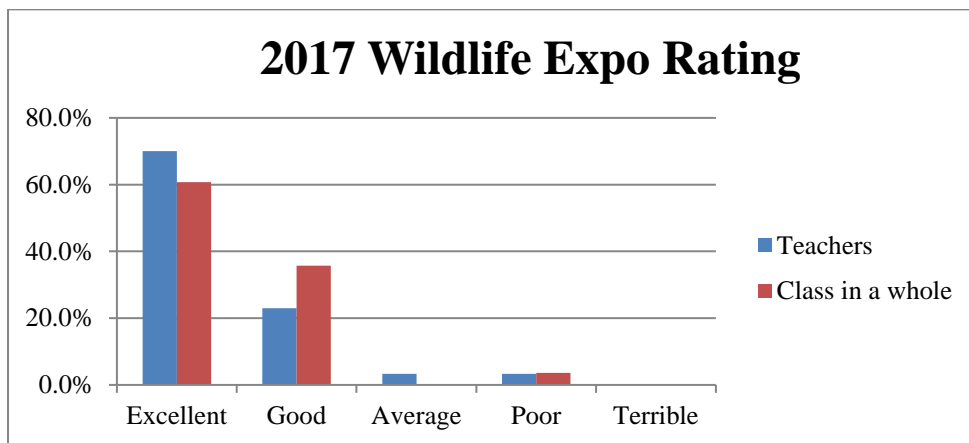


FIGURE 17: RATING OF THE 2017 WILDLIFE EXPO

Summary of findings

On-site visitor surveys results.

Overall, visitor participation in responding the surveys was higher for the 2017 Wildlife Expo in comparison to 2016. A total of 649 surveys were completed during September 22-24 at the Lazy E Arena. Weather conditions were ideal during the Wildlife Expo and the amount of time required to complete the interview to participants was much less than previous years which may have enhanced the interview process.

Demographic results indicate that a majority of females participated in the Wildlife Expo interviews on Friday, Saturday and Sunday which may be a factor for a higher percentage of female participants versus male participants. In reference to race and ethnicity the results reflect a significant difference between Oklahoma demographics and those of the Wildlife Expo participants. Friday had a higher percentage of the first-time visitor, Saturday and Sunday had a higher percentage of repeat visitors.

The trend of repeat visitors continues to increase, and the experiences of participants at the Wildlife Expo were given the highest satisfactory rating with a very few exceptions. Overall, results indicate that participants are knowledgeable of ODWC as operating and organizing the Wildlife Expo.

Pre-Expo Online School Survey

Pre-Expo online surveys were completed by 56 teachers from 40 different schools including 13 homeschool programs. A total of 146 classes were reported with representation of first to twelfth grades. Results indicate that 52% of the teachers who completed the survey teach wildlife conservation in addition to the required curriculum. This shows that although it is not required teachers may find that it is important for the students to have a basic understanding of what wildlife conservation is and are able to integrate it into the curriculum.

Results revealed the number of students that have gone fishing before, have caught a fish and have family members that fish is uniform and higher than the number of students who have hunted and have family members that hunt. Results also indicate that the number of students that have fired a bow and arrow is higher than the students who own their own equipment.

Post-Expo School Survey

Post-Expo online surveys were completed by 30 teachers from 29 different schools including 6 homeschool programs. A total of 78 classes were reported with representation of first to twelfth grades.

Results show that the number of students who did something they have never done before at the Wildlife Expo was significantly higher compared to students who fired a firearm and fired a bow and arrow for the first time. Shooting, archery/bow and arrow, and fishing had the highest frequency response as the classes' favorite activities at the 2017 Wildlife Expo.

Teachers were asked to identify the Oklahoma Academic standards offered to their classes by the Wildlife Expo. Although several different responses were provided by the teachers it should be noted that more than half of respondents did not identify any standards.

Finally, this year the Wildlife Expo was rated by the teachers, personally, and the class in a whole on a five-point scale from 1 (Terrible) to 5 (Excellent). Overall, the 2017 Wildlife Expo was rated mostly as excellent and good by the majority of respondents.

Appendix A: On-site Survey



2017 Wildlife Expo Survey

"Hi! I'm helping the Wildlife Department gather information to help improve the Wildlife Expo. Would you mind answering a few questions? If yes, continue, if no thank them and move on."

Internal Use Only

Interview Number: _____

Sex of Interviewee: M F

Interview Time: ____:____ AM PM

Interview Location: Arena B G R Y

1. What time did you arrive at the Wildlife Expo? ____:____AM PM

2. **FRIDAY ONLY:**
Did you personally arrive on a bus with your group today? Yes→ Skip to Q5 No

3. Including you, how many adults came in your vehicle? 1 2 3 4 5 6+

4. How many youth/children came in your vehicle? 0 1 2 3 4 5+

5. Have you attended the Wildlife Expo before this year? Yes No

6. Within the least year did you go... Fishing? Hunting?

7. In your opinion, who organizes and operates the Wildlife Expo? Lazy E Arena ODWC Other

8. *Scale: 1=Very Dissatisfied, 5=Very Satisfied*
How would you rate your overall experience at the Wildlife Expo? 1 2 3 4 5

9. Home ZIP Code: _____

10. Year Born: _____

11. **Race:** **Ethnicity:**

<input type="checkbox"/> American Indian or Alaska Native	<input type="checkbox"/> White	<input type="checkbox"/> Hispanic or Latino
<input type="checkbox"/> Asian	<input type="checkbox"/> Bi-racial or multi-racial	<input type="checkbox"/> Not Hispanic or Latino
<input type="checkbox"/> Black or African American		

Thank you for your time, and please enjoy your day!

Appendix B: Pre-Expo School Online Survey

Disclaimer

Dear Teacher, Thank you for taking your time to register your class for the Wildlife Expo. In order to help the Wildlife Department continue making improvements to the Expo and wildlife conservation, we invite you to participate in this short survey. This questionnaire should only take you about 5-10 minutes to complete, and there are no known risks associated with this study that is greater than those you ordinarily encounter in daily life. There are also no direct benefits that you will receive by participating, but you may be helping improve Wildlife Expo and wildlife conservation. All information collected will be kept private, and results will only be reported as group findings. There will be no way to identify your answers on this questionnaire, and all records will be securely stored. Your participation is completely voluntary, and you may skip any questions or stop at any time. If you do not want to participate, simply close your browser. Thank you for your time. If you choose to participate: Please, click NEXT arrow if you choose to participate. By clicking the NEXT arrow, you are indicating that you freely and voluntarily and agree to participate in this study and you also acknowledge that you are at least 18 years of age. It is recommended that you print a copy of this consent page for your records before you begin the study by clicking below.

- Yes
- No

Direction This section is for the teacher to identify general descriptive information about the class.

1. What is the name of the school?
2. What is the school zip code?
3. What grade is the class?
4. How many students are in this class or classes?
5. Do you teach wildlife conservation in your class?
 - Yes, it is part of the required curriculum
 - Yes, but it is in addition to the required curriculum
 - No

Direction This section is used to have the teacher identify how many students in your class participate in different hunting and fishing activities.

6. Of your class, how many students have gone fishing before?
7. Of your class, how many students have caught a fish before?
8. Of your class, how many students have family members that fish?

9. Of your class, how many students have gone hunting before?
10. Of your class, how many students have family members that hunt?
11. Of your class, how many students have fired a bow and arrow before (not toy)?
12. Of your class, how many students own their own bow and arrow equipment (not toy)?

Appendix C: Post-Expo School Online Survey

Disclaimer

Dear Teacher, Thank you for taking the time to bring your class to the Wildlife Expo. In order to help the Wildlife Department continue making improvements to the Expo, we invite you to participate in this short survey. This questionnaire should only take you about 5-10 minutes to complete, and there are no known risks associated with this study that is greater than those you ordinarily encounter in daily life. There are also no direct benefits that you will receive by participating, but you may be helping improve Wildlife Expo. All information collected will be kept private, and results will only be reported as group findings. There will be no way to identify your answers on this questionnaire, and all records will be securely stored. Your participation is voluntary, and you may skip any questions or stop at any time. If you do not want to participate, simply close your browser. Thank you for your time. If you choose to participate: Please, click NEXT arrow if you choose to participate. By clicking the NEXT arrow, you are indicating that you freely and voluntarily and agree to participate in this study and you also acknowledge that you are at least 18 years of age. It is recommended that you print a copy of this consent page for your records before you begin the study by clicking below.

- Yes
- No

Direction This section is for the teacher to identify general descriptive information about the class and the teacher's opinion about the expo.

1. What is the name of the school?
2. What is the school zip code?
3. What grade is the class?
4. How many students are in this class or classes?
5. How many students attended the expo?
6. Including yourself how many teachers attended the Wildlife Expo representing your school?
7. How many non faculty chaperones came with you to the expo just for your school?

8. How do you, the teacher, rate this year's Wildlife Expo?

- Excellent
- Good
- Average
- Poor
- Terrible

9. Which Oklahoma academic standards do you believe the Wildlife Expo offers to your class?

Direction This section is used to have the teacher identify how many students per class participated in different activities at the expo.

10. How many students did something at the Wildlife Expo they have never done before?

11. How many students fished at the Wildlife Expo?

12. How many students fished for the first time at the Wildlife Expo?

13. How many students caught their first fish at the Wildlife Expo?

14. How many students fired a firearm for the first time at the Wildlife Expo?

15. How many students fired a bow and arrow for the first time at the Wildlife Expo?

16. Which activities at the expo were the class' favorite (for example: rock climbing, atlatl, shotgun range)?

17. How does the class in a whole rate this years' Wildlife Expo (record the item that best matches the majority of the student responses)?

- Excellent
- Good
- Average
- Poor
- Terrible

Appendix D: IRB

Oklahoma State University Institutional Review Board

Date: Tuesday, September 12, 2017 Protocol Expires: 8/31/2019
IRB Application No: ED16137
Proposal Title: Assessment of public perception of ODWC's Wildlife Expo - 2016

Reviewed and Processed as: Exempt
Modification

Status Recommended by Reviewer(s) **Approved**

Principal Investigator(s):

Catalina Palacios
190 CRC
Stillwater, OK 74078

Curtis Clemens
2001 N Perkins Rd Q192
Stillwater, OK 74078

Jay Post
180 Colvin Center
Stillwater, OK 74078

Tim Passmore
186 Colvin Center
Stillwater, OK 74078

The requested modification to this IRB protocol has been approved. Please note that the original expiration date of the protocol has not changed. The IRB office MUST be notified in writing when a project is complete. All approved projects are subject to monitoring by the IRB.

- The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

The reviewer(s) had these comments:

Mod to 1) change title from "Assessment of public perception of ODWC's Wildlife Expo - 2016" to "Assessment of public perception of ODWC's Wildlife Expo - 2017", 2) add Catalina Palacios as PI and move Curtis Clemens to Co-PI, 3) give ODWC fishing bobber to participants while supplies last, 4) update scripts, 5) revise surveys and 6) revise consent

Signature :



Hugh Crethar, Chair, Institutional Review Board

Tuesday, September 12, 2017
Date

Oklahoma State University Institutional Review Board

Date: Friday, September 15, 2017 Protocol Expires: 8/31/2019
IRB Application No: ED16137
Proposal Title: Assessment of public perception of ODWC's Wildlife Expo - 2017

Reviewed and Processed as: Exempt
Modification

Status Recommended by Reviewer(s) **Approved**

Principal Investigator(s):

Catalina Palacios
190 CRC
Stillwater, OK 74078

Curtis Clemens
2001 N Perkins Rd Q192
Stillwater, OK 74078

Jonathan Hines
Broken Arrow, OK 74014

Tim Passmore
186 Colvin Center
Stillwater, OK 74078

The requested modification to this IRB protocol has been approved. Please note that the original expiration date of the protocol has not changed. The IRB office MUST be notified in writing when a project is complete. All approved projects are subject to monitoring by the IRB.

- The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

The reviewer(s) had these comments:

Remove Jay Post as Co-PI add Jonathan Hines

Signature :



Hugh Crethar, Chair, Institutional Review Board

Friday, September 15, 2017
Date

References

U.S. Bureau of Census. American Fact Finder. Retrieved November 4, 2017 from
<https://www.census.gov/quickfacts/OK>