

WHY ZOOS & AQUARIUMS MATTER WORKBOOK

Working with Community Perceptions
to Achieve Your Goals

John Fraser and Jessica Sickler

**ASSOCIATION
OF ZOOS &
AQUARIUMS**



The **Wildlife Conservation Society** saves wildlife and wild lands through careful science, international conservation, education, and the management of the world's largest system of urban wildlife parks. These activities change attitudes toward nature and help people imagine wildlife and humans living in sustainable interaction on both a local and a global scale. WCS is committed to this work because we believe it essential to the integrity of life on Earth.

Wildlife conservation involves both a practical understanding of the science of biodiversity loss and how human behavior can change to reduce our impact on the biosphere. The Public Research and Evaluation Program operated within the WCS Institute from 2006 through 2008 to aid WCS and other conservation organizations in achieving their missions by providing timely and practical social science research and evaluation into the human dimensions of wildlife conservation. These dimensions include understanding how people understand conservation concepts, key motivators for engaging in conservation activities and what it will require to develop new social norms that promote a more conservation-minded society. This publication represents the culmination of three years of research into how zoos and aquariums are valued in American society in order to provide knowledge to these conservation minded institutions about how they can better meet their conservation mission.

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The **Association of Zoos and Aquariums (AZA)**, founded in 1924, is a nonprofit organization dedicated to the advancement of accredited zoos and aquariums in the areas of animal care, wildlife conservation, education and science. AZA is North America's leading accrediting organization for zoos and aquariums and accredits only those institutions that have achieved rigorous standards for animal care, education, wildlife conservation and science. With its 217 accredited members, AZA is building North America's largest wildlife conservation movement.

The AZA Mission

AZA-accredited zoos and aquariums are places where people connect with animals. AZA is dedicated to excellence in animal care and welfare, conservation, education, and research that inspires respect for animals and nature. AZA strives to:

- Establish and maintain excellent professional standards in all AZA institutions through the accreditation program.
- Provide AZA members with the best possible services and best practices.
- Establish and promote high standards of animal care and welfare.
- Promote and facilitate collaborative conservation programs.
- Advocate for effective governmental policies for its members and for wildlife.
- Strengthen and promote conservation education programs for the public and professional development for its members.
- Raise awareness of the collective impact of AZA members and their programs.

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Agenda Item	Participant will be able to
Welcome and Introductions	Begin to form a network of people and resources that they can utilize in the area of public research and program development.
Thinking about Stakeholders	Identify the different community members that comprise the study populations and describe why each is important to understand.
The Zoo/Aquarium as an Educational Institution	<ul style="list-style-type: none">> Explore the diverse contributions of each department to the education mission of AZA facilities.> Explain the value different community members place on the unique nature of the zoo/aquarium learning experience.> Develop a plan to transform existing educational programming, marketing tools, communications strategies, and exhibit designs to be more effective.> Describe how they might research educators' values in their own communities.
Family Matters	<ul style="list-style-type: none">> Appreciate why families frequent and value zoos and aquariums.> Analyze examples of marketing, programs, and exhibits, and discuss how they address these values.> Consider how their own programs might be changed to reflect this new understanding and how they might use the provided research tools at their own facilities.
The Multi-Institutional Research Project	<ul style="list-style-type: none">> Identify the findings of the project.> Conduct their own visitor research using the Visitor Evaluation Toolbox.> Understand the practical considerations in and effective methods for conducting valid research at their own facilities.> Recognize how they can contribute to a growing information base at a national level.
The Other Perspectives	<ul style="list-style-type: none">> Investigate research findings related to the community members that are most relevant to them.> Share ideas to develop and improve their particular programs based on these findings.> Explore the possibilities of conducting similar research.
Review and Synthesis	<ul style="list-style-type: none">> Review and synthesize the workshop's activities and information in order to determine the action steps they wish to take upon returning to their institutions.> Provide feedback to one another.

THINKING ABOUT STAKEHOLDERS

Identifying the Different Community Members

WHY ZOOS AND AQUARIUMS MATTER

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Community Member

Why does the opinion of this group matter?

Zoo/Aquarium Visitors

Educators

Volunteers

Media Personnel

Spiritual Leaders

Politicians

Conservation Biologists

Zoo/Aquarium Peers

THE ZOO/AQUARIUM AS AN EDUCATIONAL INSTITUTION

How Are AZA Facilities Inherently Educational?

Activity 1

You will rearrange into diverse discussion groups of 6-8. Each discussion group will include members from a variety of zoo/aquarium departments, and include employees from small, medium, and large institutions.

Other than the Education or Exhibit Departments, how does each unit of your zoo or aquarium contribute to and/or support the educational mission?

- Administration and Business (Finance, HR, Technology)

- Animal Management

- Development

- Conservation Conservation

- Government Relations

- Institutional Officials (Director, CEO, Board)

- Park or Facilities Management

- Public Affairs

- Visitor Services

- Other departments/units



THE ZOO/AQUARIUM AS AN EDUCATIONAL INSTITUTION

Using the Research Findings

Activity 2

In your discussion group, reflect upon the research results from the various community members regarding how they view the educational value of zoos and aquariums.

How can the results be leveraged to create more effective...

Educational programming?

Marketing tools?

Communication strategies?

Exhibit
designs?

Guest
relations?

Other departmental
activities and strategies?



One new idea I heard today:

THE MULTI-INSTITUTIONAL RESEARCH PROJECT

Findings and Tools from MIRP

Activity 4

Facilitators will present summary findings from AZA's Multi-Institutional Research Project (MIRP). Following these findings, the group will explore the techniques and instruments for implementation and analysis of the visitor research and analysis tools that resulted from this research.

Tool #1: Motivational Categories of Visitors

- Instrument
- How to Administer
- Analyzing Data

Tool #2: Change in Visitors' Conservation Attitudes

- Instrument
- How to Administer
- Analyzing Data

Tool #3: Visitors' Incoming Understanding

- Personal Meaning Map
- How to Administer
- Analyzing Data

Tool #4: What Do Visitors Do and Think?

- Reflective Tracking
- How to Administer
- Analyzing Data



Motivational Identity Survey: Instrument

ID#:

TIME:

DATE:

Why are you here today?

Check the 5 that best reflect why you are here today.

For those 5 statements only, indicate the importance of the reason.

- If a statement represents a **very important reason you are here today**, you would circle **7**.
- If a statement represents a **less important reason you are here today**, you would circle **1**.

Check 5

	Less Important Reason				More Important Reason		
	1	2	3	4	5	6	7
<input type="checkbox"/> ...I like the types of things I can learn here							
<input type="checkbox"/> ...I came a long time ago and want to revisit it							
<input type="checkbox"/> ...I actively support conservation and the protection of wildlife							
<input type="checkbox"/> ...It is one of the best places to visit around here							
<input type="checkbox"/> ...I support conservation							
<input type="checkbox"/> ...the many different species fill me with wonder							
<input type="checkbox"/> ...my wife/partner/husband made me come							
<input type="checkbox"/> ...I discover things about myself when I come here							
<input type="checkbox"/> ...I frequently visit zoos/aquariums when I go on trips							
<input type="checkbox"/> ...I get more here than going to the mall or a movie							
<input type="checkbox"/> ...It was my choice for how to spend the day							
<input type="checkbox"/> ...I support the mission to study, celebrate and protect animals							
<input type="checkbox"/> ...my family/friends have good experiences here							
<input type="checkbox"/> ...this is a good way for my family/friends to share quality time							
<input type="checkbox"/> ...I feel at peace in these surroundings							
<input type="checkbox"/> ...my family/friends enjoy themselves here							
<input type="checkbox"/> ...coming here helps me appreciate nature							
<input type="checkbox"/> ...I like to watch the animals							
<input type="checkbox"/> ...I like to study wildlife							
<input type="checkbox"/> ...this is an important institution in this community							

AGE ____ **Been here before?** No ____ Once or twice ____ Number of times ____ Come often ____

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Motivational Identity Survey: Data Entry Tool

Motivational Identity Tool
Survey Data Entry Sheet

Enter a value 1 through 7 for each of the chosen responses.

Reason	Value (1 to 7)
...I like the types of things I can learn here	
...I came a long time ago and want to revisit it	
...I actively support conservation and the protection of wildlife	
...It is one of the best places to visit around here	
...I support conservation	
...the many different species fill me with wonder	
...my wife/partner/husband made me come	
...I discover things about myself when I come here	
...I frequently visit zoos/aquariums when I go on trips	
...I get more here than going to the mall or a movie	
...It was my choice for how to spend the day	
...I support the mission to study, celebrate and protect animals	
...my family/friends have good experiences here	
...this is a good way for my family/friends to share quality time	
...I feel at peace in these surroundings	
...my family/friends enjoy themselves here	
...coming here helps me appreciate nature	
...I like to watch the animals	
... I like to study wildlife	
...this is an important institution in this community	

Date Survey Data Entered	3/13/2008
Date Survey Taken	
Survey ID#	
Respondent's Category	

Submit Survey

Go to Home Page

Review Survey Data

Surveys Added This Session	0
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The screenshot shows a web browser window with the following content:

Motivational Identity Tool

Home Page

Welcome to the *Motivational Identity database* .

Click here to enter survey data into the dat
 Click here to view the database
 Click here to clear the database

AZA Likert Survey Tool Results

Sample Size

% of Respondents falling into each category:

Experience Seeker	<input type="text"/>
Professional Hobby	<input type="text"/>
Spiritual Pilgrim	<input type="text"/>
Facilitator	<input type="text"/>
Explorer	<input type="text"/>
Non-Dominant	<input type="text"/>

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Motivational Identity Survey: Instructions for Using Data Entry and Analysis Tool

Important Note: When opening the Motivational Identity Tool, you may notice a prompt of whether to Enable or Disable Macros. Users should always Enable macros to use these tools. If you receive a warning that security is set to not allow macros at all, go to Tools-Macros-Security in MS Excel and select Medium level security. Close MS Excel and reopen the tool.

Home Page sheet

- All cells are locked, nothing on this sheet can be edited. The sheet may be unprotected by simply selecting Tools-Protection-Unprotect Sheet; this is not recommended except for minor cosmetic changes. Protect the sheet again by selecting Tools-Protection-Protect Sheet.
- Survey results are displayed in the yellow box and always reflect all data in the database. Note that blank cells mean that there is no data to report results for, which should be evident from the Sample Size value of zero.
- There are 3 buttons on this sheet:
 - > **Add to Database** – takes the user to the Data Entry Tool sheet (see below) where survey results can be entered
 - > **Review Survey Results** – takes the user to the Database sheet where users can look at all data in the database
 - > **Clear Database** – will clear all data from the database. When the user clicks on this they get a warning with Yes and No buttons. Clicking No will result in not clearing the database.

Data Entry Tool sheet

- This sheet is protected. The sheet may be unprotected by simply selecting Tools-Protection-Unprotect Sheet; this is not recommended except for minor cosmetic changes. Protect the sheet again by selecting Tools-Protection-Protect Sheet. It is very important when re-protecting this sheet that you de-select the option for “Select locked cells”.
- Note that only the user input cells on this sheet can be selected and edited which makes navigation around the sheet easier. Using the arrow keys or tab key will automatically move to the next user input cell.
- The Date Survey Data Entered cell is supposed to be used to capture the date that the user is entering the data. It automatically defaults to the current date according to the computer’s system clock. This is informational only and does not affect the results shown on the Home Page.
- The Date Survey Taken cell is supposed to be used to capture the date that the current survey was collected. This is informational only and does not affect the results shown on the Home Page.
- The Survey ID is a user input that may be used to track surveys. This is informational only and does not affect the results shown on the Home Page. Further, it may be left blank if desired.
- Input cells for the values only allow values 1 through 7 to be entered.
- If more than 5 values are entered, cell C4 becomes red and displays an error message.

- Respondent's Category calculates the result of the survey (i.e., the category that the respondent falls into, or the value Non-Dominant). Note that a result is only shown when there are exactly 5 values entered in the column D input cells.
- Surveys Added This Session is an informational cell showing how many surveys were added since accessing the Data Entry Tool sheet. Whenever you leave the Data Entry Tool sheet, this number is reset to zero. This is informational only.
- The 3 buttons on this sheet are:
 - > **Submit Survey** – If there are exactly 5 values in the column D input cells, then the survey results are copied out to the database and then the column D input cells are cleared to allow the user to begin entering the next survey. If there are not exactly 5 values in the column D input cells, the user is prompted with the error and asked whether to continue. If the user selects Yes, the data will be added to the database even though it does not follow the proper rules.
 - > **Go to Home Page** – takes the user to the Home Page sheet
 - > **Review Survey Data** – takes the user to the Database sheet
- Shows all survey data entered into the tool since the last time the Clear Database function was used
- Note that there is a column on this sheet for SurveyNum; it is important to leave the values in this column as they are, but note that the values themselves are not meaningful. It is more important that there is a value on the row, in that column, so that the tool knows there is data on that row. It is even possible for rows to be added to the database with duplicate SurveyNum values. This is OK and will not affect operation of the tool.
- All cells are editable; this sheet is not protected.
- Users may use this sheet to directly enter data if they wish, however, this sheet does not automatically calculate the respondent's category; it may be useful to use this sheet to correct typos, but note again that the category value is not being calculated, so it would be a better idea to delete the row on which an incorrect survey has been saved, and then go back to the Data Entry Tool and reenter the survey. However, you must never delete the first row of data (Row 3). If there is incorrect data on that row, clear the contents of each cell, do not delete the whole row.
- There are 3 buttons on this sheet:
 - > **Add to Database** – takes the user to the Data Entry Tool sheet (see previous) where survey results can be entered
 - > **Go to Home Page** – takes the user to the Home Page sheet
 - > **Clear Database** – will clear all data from the database. When the user clicks on this they get a warning with Yes and No buttons. Clicking No will result in not clearing the database.

Database sheet

How Much Do You Agree With Each Statement?

Circle a number in each row think of how you felt **BEFORE** your visit and then rate each sentence as to how you feel **NOW**.

BEFORE VISIT

Not at all...Completely

NOW

Not at All...Completely

1 2 3 4 5 6 7	Being at the zoo/aquarium is fun	1 2 3 4 5 6 7
1 2 3 4 5 6 7	I am part of the problems with nature	1 2 3 4 5 6 7
1 2 3 4 5 6 7	I am part of the solutions to nature's problems	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Zoos/aquariums care about animals	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Zoos/aquariums are important for wildlife conservation	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Animals are amazing	1 2 3 4 5 6 7
1 2 3 4 5 6 7	We need to help protect animals	1 2 3 4 5 6 7
1 2 3 4 5 6 7	We need to help protect plants	1 2 3 4 5 6 7
1 2 3 4 5 6 7	There is a lot I can do to conserve	1 2 3 4 5 6 7
1 2 3 4 5 6 7	There is not much I can do to help nature	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Nature helps define America's national heritage and character	1 2 3 4 5 6 7
1 2 3 4 5 6 7	Nature is a place to renew the human spirit	1 2 3 4 5 6 7
1 2 3 4 5 6 7	We have the responsibility to leave healthy ecosystems for our families and future generations	1 2 3 4 5 6 7

AGE ____ Been here before? No ____ Once or twice ____ Number of times ____ Come often ____

THANK YOU!!

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Conservation Attitudes Survey: Data Entry Tool

Conservation Attitudes Tool
Survey Data Entry Sheet

#	Pre (1 to 7)	Question	Post (1 to 7)
1		Being at the zoo/aquarium is fun	
2		I am part of the problems with nature	
3		I am part of the solutions to nature's problems	
4		Zoos/aquariums care about animals	
5		Zoos/aquariums are important for wildlife conservation	
6		Animals are amazing	
7		We need to help protect animals	
8		We need to help protect plants	
9		There is a lot I can do to conserve	
10		*There is not much I can do to help nature	
11		Nature helps define America's national heritage and character	
12		Nature is a place to renew the human spirit	
13		We have the responsibility to leave healthy ecosystems for our families and future generations	

Date Survey Data Entered 3/13/2008
Date Survey Taken
Survey ID

[Submit Survey](#)
[Go to Home Page](#)
[Review Survey Data](#)

Surveys Added This Session 0

**NOTE: For question 10, results are reversed by the tool when entered into the database. Do not alter the respondent's entry. This is done for consistency in statistical calculations.*

Conservation Attitudes Tool

Home Page

Welcome to the *Conservation Attitudes database* .

Add to Database

Click here to enter survey data into the database.

Review Survey Data

Click here to view the database

Clear Database

Click here to clear the database

Sample Size

#	Scales	Pre				Post				Significance
		Mean	Median	Mode	Std Dev	Mean	Median	Mode	Std Dev	
1	Being at the zoo/aquarium is fun									
2	I am part of the problems with nature									
3	I am part of the solutions to nature's problems									
4	Zoos/aquariums care about animals									
5	Zoos/aquariums are important for wildlife conservation									
6	Animals are amazing									
7	We need to help protect animals									
8	We need to help protect plants									
9	There is a lot I can do to conserve									
10	There is not much I can do to help nature									
11	Nature helps define America's national heritage and character									
12	Nature is a place to renew the human spirit									
13	We have the responsibility to leave healthy ecosystems for our families and future generations									

#	Sub Scales	Pre				Post				Significance
		Mean	Median	Mode	Std Dev	Mean	Median	Mode	Std Dev	
1	Individual responsibility									
2	Attitude toward zoos/aquariums									
3	Human protection of nature									

If Significance # < .05 then it IS statistically significant

If Significance # > .05 then it is NOT statistically significant

THE MULTI-INSTITUTIONAL RESEARCH PROJECT

Conservation Attitudes Survey: Instructions for Using Data Entry and Analysis Tool

Important Note: When opening the Conservation Attitudes Tool, you may notice a prompt of whether to Enable or Disable Macros. Users should always Enable macros to use these tools. If you receive a warning that security is set to not allow macros at all, go to Tools-Macros-Security in MS Excel and select Medium level security. Close MS Excel and reopen the tool.

Home Page sheet

- All cells are locked, nothing on this sheet can be edited. The sheet may be unprotected by simply selecting Tools-Protection-Unprotect Sheet; this is not recommended except for minor cosmetic changes. Protect the sheet again by selecting Tools-Protection-Protect Sheet.
- Survey results are displayed in the tables. All results are live calculations against all data in the database. Note that blank cells mean that there is no data to report results for and/or that a particular formula is resulting in a MS Excel error message such as “#DIV/0”, “#NUM!”, or “#N/A”. The cell is not actually blank, but the font color is White so that the error message is not visible.
- There are 3 buttons on this sheet:
 - > **Add to Database** – takes the user to the Data Entry Tool sheet (see below) where survey results can be entered
 - > **Review Survey Results** – takes the user to the Database sheet where users can look at all data in the database
 - > **Clear Database** – will clear all data from the database. When the user clicks on this they get a warning with Yes and No buttons. Clicking No will result in not clearing the database.

Data Entry Tool sheet

- This sheet is protected. The sheet may be unprotected by simply selecting Tools-Protection-Unprotect Sheet; this is not recommended except for minor cosmetic changes. Protect the sheet again by selecting Tools-Protection-Protect Sheet. It is very important when re-protecting this sheet that you de-select the option for “Select locked cells”.
- The legend at the bottom of the sheet explains the color coding used for shaded cells on this sheet.
- Note that only the user input cells on this sheet can be selected and edited which makes navigation around the sheet easier. Using the arrow keys or tab key will automatically move to the next user input cell. Note that to fill out this survey, some users may wish to enter all “Pre” values (column C), and then all the “Post” (column E) values. This can be done by using the Down arrow key instead of the tab key. The tab key will select cells from left to right, so it will proceed from Pre to Post and then back to the next Pre input cell.
- The Date Survey Data Entered cell is supposed to be used to capture the date that the user is entering the data. It automatically defaults to the current date according to the computer’s system clock. This is informational only and does not affect the results shown on the Home Page.
- The Date Survey Taken cell is supposed to be used to capture the date that the current survey was collected. This is informational only and does not affect the results shown on the Home Page.
- The Survey ID is a user input that may be used to track surveys. This is informational only and does not affect the results shown on the Home Page. Further, it may be left blank if desired.
- Input cells for the Pre and Post values only allow values 1 through 7 to be entered.

- Surveys Added This Session is an informational cell showing how many surveys were added since accessing the Data Entry Tool sheet. Whenever you leave the Data Entry Tool sheet, this number is reset to zero. This is informational only.
- The 3 buttons on this sheet are:
 - > **Submit Survey** – If all Pre and Post values have been entered for questions 1 through 13, then the survey results are copied out to the database and then the Pre and Post input cells are cleared to allow the user to begin entering the next survey. If not all Pre and Post input cells are filled in, the user is prompted with the error and asked whether to continue. If the user selects Yes, the data will be added to the database even though it does not follow the proper rules.

NOTE: Values for question 10 are reversed in the database as follows:

Value entered by User	Value stored in Database
7	1
6	2
5	3
4	4
3	5
2	6
1	7

- > **Go to Home Page** – takes the user to the Home Page sheet
- > **Review Survey Data** – takes the user to the Database sheet

Database sheet

- Shows all survey data entered into the tool since the last time the Clear Database function was used
- Note that there is a column on this sheet for SurveyNum; it is important to leave the values in this column as they are, but note that the values themselves are not meaningful. It is more important that there is a value on the row, in that column, so that the tool knows there is data on that row. It is even possible for rows to be added to the database with duplicate SurveyNum values. This is OK and will not affect operation of the tool.
- All cells are editable; this sheet is not protected
- Users may use this sheet to directly enter data if they wish, However, when this is done, so they must be sure to transpose data entered in columns E through AD over to columns AG through AZ appropriately so that the Significance (TTEST) calculations for the Sub Scales are accurate on the Home Page sheet; it may be useful to use this sheet to correct typos, but note again that care should be taken to keep columns AG through AZ correct; it might be a better idea to delete the row on which an incorrect survey has been saved, and then go back to the Data Entry Tool and reenter the survey. However, you must never delete the first row of data (Row 3). If there is incorrect data on that row, clear the contents of each cell, do not delete the whole row.
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 - > **Add to Database** – takes the user to the Data Entry Tool sheet (see below) where survey results can be entered
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Conservation Attitudes Survey: Instrument

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WILDLIFE

THE MULTI-INSTITUTIONAL RESEARCH PROJECT

WHY ZOOS AND AQUARIUMS MATTER

Working with Community Perceptions to Achieve Your Goals

Reflective Tracking Map: Example



One new idea I heard today:

REFLECTION AND SYNTHESIS

Setting and Planning Smart Goals

Review the Action Plans you created today along with your notes and other workbook materials. Use the following worksheets to select and plan three reasonable goals that you will endeavor to achieve once you return to your institution.

GOAL 1

Goal:

Tasks:

Timeline:

Key
Institutional
Partners:

Possible
Challenges:

Date Due:

GOAL 2

Goal

Tasks:

Timeline:

Key
Institutional
Partners:

Possible
Challenges:

Date Due:

GOAL 3

Goal:

Tasks:

Timeline:

Key
Institutional
Partners:

Possible
Challenges:

Date Due:

WHY ZOOS & AQUARIUMS MATTER WORKBOOK

