THE FUTURE OF NATURE CENTERS:

A VIEW FROM THE PROFESSION

A project report

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Andrew Revelle

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ABSTRACT

The purpose of this project was to explore what leaders in the nature center profession view as the societal and economic future of nature centers over the next 25 years. The project identified significant trends and developments in regards to staffing, fundraising, physical property, programs and services, organizational governance, and community role of nature centers. The most recent research on the state of American nature centers was conducted in 1989 by the Natural Science for Youth Foundation. This project followed-up on many of the same concepts from that study, but in a modern context. Recent literature indicates that the 2008 economic recession has had a continued impact on the non-profit community. Thus, this study also examined how the recession will be affecting nature center development. This study used a twopart research methodology: a descriptive survey and in-depth interviews. The survey of nature center professions established a broad base of knowledge about the future of nature centers. The interviews of seasoned and emerging leaders in the profession discovered a wide variety of trends and predictions for how nature centers will change. The leaders in the profession emphasized that nature centers must continue to be relevant in an increasingly naturedisconnected society. They also foresee changes to fundraising, an evolution of programming, increasing professionalism, and a strengthening of nature center properties. This research commemorates the 25th anniversary of the Association of Nature Center Administrators (ANCA) by looking ahead to the next 25 years. It also provides recommendations for how ANCA can continue to support the growth of nature centers in the future.

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CHAPTER I

INTRODUCTION

Statement of Problem

Nature centers are vital organizations to the field of environmental education. Nature centers educate the public as well as foster connections between communities and the natural world. It is vital for nature centers to strategically plan development in order to be successful in the future. This study commemorates the 25th anniversary of the Association of Nature Center Administrations by looking ahead to how centers will change over the next 25 years. This study is asking the research question: What do leaders in the nature center profession view as the societal and economic future of nature centers in the U.S. over the next 25 years?

Sub Problems

- 1. Identify nature center professionals to pursue for research respondents.
- Establish a broad base of knowledge regarding perceptions about the future from nature center professionals.
- Identify leaders in the nature center profession with experience in strategic planning for centers.
- 4. Develop an understanding of what leaders in the field view as the future of nature centers over the next 25 years.
- Synthesize viewpoints into a report forecasting the future of nature centers over the next 25 years.

Significance of the Research

As non-profit organizations, nature centers must be ready to adapt to societal and economic influences in order to remain successful. Thus, it is vital for administrators and board members to look ahead and prepare for developments that will affect their organizations. However, there has been no research into the future of nature centers since the 1980's. Major developments within the profession as well as in our society and economy have occurred since then that may have affected nature centers. It is time for new research investigating the future of nature centers. This study fills that gap. It identified trends in how nature centers are changing, reacting to the modern non-profit landscape, and planning for the future. It discovered where the leaders in the field are headed.

The Association of Nature Center Administrators (ANCA) sponsored this research. ANCA is an international network of nature center and environmental learning center leaders. ANCA works to enhance professionalism and provide the support system critical to innovative and progressive management (ANCA, 2013). ANCA requested this study to commemorate the 25th anniversary of the organization and look forward to the next 25 years. This research culminated in an ANCA publication: The ANCA Blue Ribbon Report. The report provides nature center professionals with key information on how the leaders in the field perceive the future of nature centers. Thus, The ANCA Blue Ribbon Report is a valuable tool for nature center administrators and board members in their strategic planning to meet their missions, fulfill their visions, and grow their organizations in the future. The report also provides recommendations to ANCA on how it can continue to support progressive nature center management as the field develops over the next 25 years.

Limitations

- 1. The study focused on the next 25 years of nature centers.
- 2. The study did not investigate the future of nature center professional careers. It will focus on the nature center at the organizational level.
- 3. The study limited informants to only those professionals actively involved with nature center organizations.
- 4. The study limited its scope to nature centers in the United States.

Abbreviations

- 1. ANCA: Association of Nature Center Administrators
- 2. <u>NSYF</u>: Natural Science for Youth Foundation

Definitions

- 1. <u>fundraising</u>: the act of gathering resources for a non-profit from charitable donations, foundations, grants, volunteers, and other sources
- 2. governance: the manner in which a board other legal entity directs an organization
- <u>nature center</u>: a non-profit organization utilizing a natural space, visitor center, and/or other buildings to practice environmental education
- 4. <u>nature center leaders</u>: directors, board members, and consultants with experience participating in strategic planning for nature centers
- 5. <u>nature center professionals</u>: active members of nature center field including educators, teacher naturalists, coordinators, directors, board members, and consultants
- 6. <u>strategic planning</u>: a disciplined, consensus building process of creating a desired future for an organization and developing strategies to attain that future (Byrd, 2000)

CHAPTER II

LITERATURE REVIEW

This chapter reviews literature related to the societal and economic influences that affect nature centers. The literature review legitimizes the importance of the present study by exploring (1) the history of American nature centers; (2) past research into the future of nature centers; (3) the economic impact of the 2008 recession on non-profits; and (4) the importance of strategic planning for nature centers.

(1) A Brief History of American Nature Centers

In order to look ahead to the future of nature centers, it was important to first understand how they have developed over time. The lineage of the American nature center traces back to museums within the national park system. In 1920, National Park Service Director Stephen Mather called for the "early establishment of adequate museums in every one of our parks for exhibiting regional flora, fauna, and minerals" (Gross & Zimmerman, 2002, p. 26). The first was the Yellowstone museum established that same year. With funding from the NPS and the American Association for Museums, many of these museums were created in parks across the country over the next several years.

In 1926, the American Association for Museums developed this concept further with the creation of Bear Mountain Park in New York. The park offered not only a museum with interpretive displays, but also nature trails, live animal exhibits, and field trips for schoolchildren. This new center was a success with Bear Mountain seeing two million urban visitors in its first ten years. By 1937, the park employed a staff of twenty-seven and had grown

to provide a youth nature school and professional development for science teachers. Bear Mountain became the prototype for the modern American nature center that went on to inspire the nature center movement after World War II (Gross & Zimmerman, 2002).

During World War II, the national park system suffered. As Gross and Zimmerman write, "They were neglected, exploited, and underfunded" (2002, p. 32). In 1956, President Eisenhower enacted Mission 66, a ten-year program to revitalize the parks by bolstering their infrastructure. Among other expansive changes, the program created the visitor center concept. Visitor centers expanded beyond the small museums into robust facilities designed as the interpretive hubs of the parks (U.S. Department of Interior, 1956).

Meanwhile, communities on the East coast were experiencing rapid urban sprawl. As development increased, so did a desire to conserve land for learning about the natural world. The National Audubon Society was instrumental in advocating for community nature centers. Their publications and nationwide campaign sounded the alarm:

Fortunately there is still a little time left to correct this situation. Communities in many areas can still save some parcels of their natural landscape, some green islands of nature, before it is too late. But they must act quickly before the bulldozers take over. They must ACT NOW! (Shomon, 1962)

In 1960, the National Audubon Society created a Nature Center Division to promote the creation of new nature centers. With significant financial support from the Rockefeller Foundation and partnerships with local government and community organizations, Audubon's Nature Center Division was able to guide the creation of nature centers around the country, igniting the nature center movement (Gross & Zimmerman, 2002). Over the next decade, nature centers rode the

crest of the flourishing environmental movement. Environmental issues rose to the forefront of the American consciousness with the publication of <u>Silent Spring</u> in 1962 and Rachel Carson's testimony to the U.S. Senate in 1963 followed up with the signing of the Clean Air and Clean Water Acts, the creation of the U.S. Environmental Protection Agency, and the first Earth Day in 1970 (Griswold, 2012). This fervent energy and public focus on the environment fueled the establishment and popularity of nature centers nationwide (Gross & Zimmerman, 2002).

(2) Past Research Forecasting the Future of Nature Centers

By the 1980's, the nature center movement began to shift from a period of energized growth towards focusing on strategic management. New centers were still being established and have continued to be to present day. However, the conversation had changed from "how do we create a nature center?" to "how do we keep centers viable?" In 1989, the Natural Science for Youth Foundation conducted a study called the NSYF Blue Ribbon Report to explore that conversation. The NSYF's report sought to assess the state of the profession as well as highlight its most pressing needs and identify trends affecting how nature centers would change in the future (Simmons & Widmar, 1989a). The study employed quantitative surveys and qualitative interviews of nature center professionals to collect data on these topics.

The data from the NSYF Blue Ribbon Report survey indicated that most nature centers were stable. 57% of survey respondents indicated that their centers were "healthy." 37.7% of survey respondents indicated that their centers were "holding on." A lack of public support was cited as the primary reason for adversity (Simmons & Widmar, 1989b). However, 80% replied that their centers had increased their staff over the last 5 years. Most notably, the survey identified funding as a dominant concern. Respondents ranked funding as "by far the biggest challenge facing

nature centers" (Simmons & Widmar, 1989a, p. 9). Specifically, finding funding sources, establishing a stable source of funding, and raising the operational budget were most significant to respondents. The study linked these funding concerns to nature centers' connections to local communities. Respondents concentrated on the image of centers in their communities and identified a desire to better define the role of nature centers (Simmons & Widmar, 1989a). The authors explain that "the overall health of a nature center, both financially and in terms of morale, may well depend upon local community support" (1989a, p. 10). Respondents emphasized that nature centers must find their niches by relating programming to community needs. They stressed the importance of broadening target audiences to become more impactful in the community.

The NSYF Blue Ribbon Report discovered strong sentiments from nature center professionals about a variety of other trends. Respondents discussed the need for the nature centers to assess and evaluate their educational programming to measure effectiveness and fulfillment of mission (Simmons & Widmar, 1989a). Deficits in skills related to marketing, public relations, and board management were identified for nature center administrators (Simmons & Widmar, 1989a). Respondents also cited land and facilities management as significant areas of improvement. Nature center leaders predicted a growing trend of nature centers hiring more staff with professional business backgrounds to focus on fundraising, strategic planning, and budgeting (Simmons & Widmar, 1989b). They also predicted future support from national and state governments for environmental education, nature centers producing official policy statements on environmental issues, and a merger of the major nature center professional organizations (Weilbacher, 1989).

The NSYF Blue Ribbon Report brought together the expertise and opinions of nature center professionals from the around the country to assess the state of the profession and make predictions about the future. The report uncovered major areas of improvement for nature centers as well as significant trends in how the field was changing. The study was a valuable resource for nature center administrators around the country as they worked to strategically position their centers for success in the future (Simmons & Widmar, 1989a).

(3) The Economic Impact of the 2008 Recession

It has been 26 years since the NSYF Blue Ribbon Report. Today, nature centers face a different social and economic landscape. One of the largest recent impacts to the landscape has been the 2008 economic recession. The recession has had a significant impact on non-profit organizations worldwide: 80% of non-profits experienced fiscal stress during the recession with 40% describing that stress as severe (Salamon, Geller, & Spence, 2009). Particularly hard hit were midsized organizations with revenues between \$500,000 and \$3 million (Salamon, Geller, & Spence, 2009), which includes many organizations in the nature center profession. Half of U.S. non-profit organizations experienced revenue loss due to declining donations and two thirds saw their endowments decrease in value by 20% or more (Salamon, Geller, & Spence, 2009). Between 2008 and 2011, non-profit organizations also reported a steady decrease in support from corporations, government grants, and investment income (Gassman, et al., 2012). Specifically, in the environmental non-profit sector, decreases in fundraising led to reduced operating reserves for organizations (Vesneski, 2009). Non-profits largely dealt with this economic stress by cutting operating expenses, reducing staff salaries and benefits, and increasing fundraising efforts (Vesneski, 2009).

This study did not find any research regarding how the recession has specifically affected nature centers. Due to the diversity of nature centers in terms of organizational structure and local economics, the recession mostly likely affected centers around the country in different ways. However, current data shows that midsized and environmental non-profits were significantly impacted. As Gassman writes, it is not only important for non-profits to adapt to current economic conditions, but also imperative for non-profits to learn from the recession and plan for cyclical economic stress in the future (2012). Thus, the nature center field must also adapt and in the face of this new landscape.

(4) The importance of strategic planning for nature centers

Non-profit organizations adapt through strategic planning. Strategic planning gives organizations the ability to be responsive to an environment that is dynamic and hard to predict (CompassPoint Nonprofit Services, 2000). Within a rapidly changing environment, strategic planning also promotes decision-making that meets the organizational mission while creating value for the public (Byrd, 2000). For nature centers specifically, strategic planning involves reviewing the organizational mission, developing value statements, establishing a vision for the future, analyzing the current state of the organization, identifying strategic issues, and developing strategies to address issues (Byrd, 2000). Byrd asserts that strategic planning is an essential tool for any organization to use to develop a plan of action to guide the organization to wards success (2000). Thus, strategic planning defines a nature center's ability to adapt to meet the societal and economic pressures of both the present and future.

Summary

Now is the time for research on how American nature centers will change in future. Internal organizational and external environmental pressures have historically impacted the societal and economic state of nature centers and continue to do so today. The resources cited above emphasize the importance of looking to the future in order to bolster the resilience and effectiveness of nature centers. The lack of literature examining the future of nature centers in the U.S. highlights the need for such a study, especially given the recent impact of the 2008 economic recession. The NSYF Blue Ribbon Report functioned as the backdrop for this research. The ANCA Blue Ribbon project examined similar concerns and investigated how the future direction of nature centers is changing.

CHAPTER III

METHODOLOGY

Sources of Data

The ANCA Blue Ribbon project gathered data from two sources: (1) nature center professionals and (2) leaders in the nature center profession. The study sampled both groups from the ANCA membership of 559 nature center professionals. ANCA is the largest and most prominent organization specifically focused on the nature center profession. Thus, the ANCA membership is the population most representative of the nature center profession as a whole. In sampling from the ANCA membership, the Blue Ribbon project was able to capture data generalizable and applicable to the greater nature center profession.

Research Methodology

The ANCA Blue Ribbon project employed grounded theory methodology. The trends, conclusions, and recommendations discussed in this report were generated inductively from the data (O'Leary, 2010). The researchers created a methodological protocol, collected data, coded and analyzed the data, and synthesized findings into conclusions about how leaders in the nature center profession perceive the future of nature centers.

The methodology was created from a question-driven perspective: the project adopted the strategies most likely to capture the credible data needed to answer the research question regardless of paradigm (O'Leary, 2010). In order to understand the perceptions about the future from the leaders in the profession, it was necessary to also establish a foundation of the greater

nature center professional community's perceptions. A mixed quantitative and qualitative approach was selected to draw data from both sources. As O'Leary writes, mixed methodology allows researchers to "capitalize on the best of both traditions" and "develop research protocols in stages" (O'Leary, 2010, p. 127-128). The ANCA Blue Ribbon project capitalized on the advantages of a mixed approach by gathering data in two phases: (1) a quantitative survey of the ANCA membership and (2) in-depth semi-structured interviews of leaders in the nature center profession. The following provides a specific description of the methods used to address each of project's sub problems:

Sub Problem 1: Identify nature center professionals to pursue for research respondents.

The ANCA membership was identified as a strongly representative sample of the nature center professional population. ANCA is the leading nature center professional organization. The organization has been working to provide critical support to nature centers, enhance the professionalism of the field, and inspire progressive management for the last 25 years. Their membership of 559 nature center professionals provided a robust sample of the nature center professional population.

Sub Problem 2: Establish a broad base of knowledge regarding perceptions about the future from nature center professionals.

The project used a quantitative survey to gather the broad range of data required to understand the perceptions of the nature center professional community. The survey was crosssectional as it used the ANCA membership as a representative sample (O'Leary, 2010). It was also descriptive; its purpose was to gain an understanding of respondents' current perceptions about the future (O'Leary, 2010).

The survey was designed, administered, and managed using the online survey company SurveyMonkey's services. The survey asked respondents ranking, multiple choice, Likert-type, and short answer questions regarding how their centers will change over the next 25 years. The survey was divided into sections of questions regarding different aspects of nature center management. As this project was in part a modern update to the NSYF Blue Ribbon Report from 1989, the survey sections mirrored the topics investigated by the NSYF study. The ANCA Blue Ribbon survey included questions regarding fundraising, staffing, educational programs and services, role in the local community, physical property, and organizational governance. The complete survey is included in Appendix B of this report.

A link to the survey was emailed to the ANCA membership on March 4th, 2014. Two reminder emails were sent to the membership over the next four weeks to encourage greater response rate. The survey was closed in mid-April, 2014. The data was organized into charts and graphs using SurveyMonkey tools. Descriptive statistics were applied to the data to measure any correlations between survey responses. The survey data was then analyzed to identify trends in how nature center professionals perceived their centers changing over the next 25 years.

Sub Problem 3: Identify leaders in the nature center profession with experience in strategic planning for centers.

The ANCA Blue Ribbon project defined leaders in the nature center profession as executive directors. Board members and other nature center staff with experience in strategic planning were also initially considered as leaders. However, the project determined that the expansive roles executive directors perform provide them with the most significant knowledge of and experience with how nature centers change. Therefore, executive directors were determined to be the most knowledgeable informants in regards to the research question.

The ANCA Blue Ribbon project investigated change in the nature center field over the next 25 years. The project sought to understand the perceptions of not only the currently established leaders in the profession, but also the emerging nature center directors who will be carrying the torch into the next quarter-century. Thus, the project pursued two groups of informants: seasoned leaders with 15 or more experience in an executive director role and emerging leaders with 5 years or less experience in an executive director role. The project sought to interview a total of twenty nature center leaders; thirteen seasoned leaders and seven emerging leaders. The researchers considered seasoned leaders to be the informants who would provide the richest data due to their wealth of experience directing nature centers. Thus, a greater number of seasoned leaders than emerging leaders were identified.

The seasoned leaders were identified from the ANCA membership. ANCA is the leading nature center professional organization. The organization also specifically provides support for nature center administrators. The ANCA membership includes many of the directors from leading nature centers around the U.S. Dr. Corky McReynolds, former Board President and long-

time member of ANCA, was used as a key informant to identify executive directors in the membership who met the project's criteria for seasoned leaders. Dr. McReynolds compiled a list of potential seasoned leaders to pursue as informants. The list was then randomly sampled for thirteen seasoned leaders.

The emerging leaders were identified through the survey of the ANCA membership by a peer reputational study technique. The survey asked respondents to nominate up to three emerging leaders with 5 years or less experience in an executive director role for the project to pursue for further research. The seven most-nominated directors made up the sample of emerging leaders. This peer reputational sampling technique was legitimized by Powers (1965).

Sub Problem 4: Develop an understanding of what leaders in the field view as the future of nature centers over the next 25 years.

The project conducted interviews of seasoned and emerging leaders to understand what leaders in the field perceived as the future of nature centers. The project used interviews because of their ability to provide rich, in-depth qualitative data (O'Leary, 2010). The interviews were semi-structured. Semi-structured interviews start with a defined questioning plan, but shift in order to follow the natural flow of conversation. They will also deviate from the plan to pursue interesting tangents (O'Leary, 2010).

An interview guide of questions was written to provide a formal path for the interviews. The interview guide is included in Appendix E of this report. The guide was intended to be flexible, allowing the conversation to explore unplanned topics. This balance ensured that the interviews were structured enough to generate standardized, quantifiable data, but flexible enough to discover unexpected data (O'Leary, 2010).

The interview guide consisted of ten questions. The questions focused on how the nature center profession would change in general as well as on the six aspects of nature centers which the survey investigated: fundraising, staffing, educational programs and services, role in the local community, physical property, and organizational governance. The questions were written to be broad to allow the informants the freedom to respond from their unique perspective. The researchers also asked clarifying questions to refine understanding and probing questions to elicit further details.

The thirteen randomly selected seasoned leaders, the peer-nominated seasoned leader, and the six emerging leaders were contacted via email to request their participation in the interviews. Two of the randomly selected seasoned leaders did not respond to the request. The list of seasoned leaders within the ANCA membership was re-sampled to identify two more informants who agreed to participate in interviews. One emerging leader did not respond. Another emerging leader could not be identified because the survey only produced seven nominees.

The interviews were conducted over the phone from May to August 2014. The interviews were projected over speaker phone and recorded using a hand-held digital recording device. The interview recordings were uploaded and stored to a work computer. The recordings were then transcribed. Initially, a speech recognition software was intended to be used to transcribe the recordings. However, after significant effort from the researchers, the software was not able to accurately transcribe the recordings. The recordings were then transcribed by the researchers themselves.

The raw interview data was analyzed to identify theories about how leaders in the field view the future of nature centers over the next 25 years. The project generated theory from the

data by using a coding approach based on the Auerbach and Silverstein procedure (2003). The procedure uses a bottom-up approach to coding by which propositions, or relevant phrases, are identified from the raw data and organized into a hierarchal framework (Auerbach & Silverstein, 2003).

The ANCA Blue Ribbon project researchers identified propositions directly from the raw interview data. Propositions were recorded in numbered lists beneath their corresponding numbered interview questions within a Microsoft Word file. As propositions were listed, they were annotated to identify from which interview they came. Each interview was labeled with an alphabetical letter from "A" through "R." Propositions were labeled with their corresponding interview letter. If a relevant phrase repeated the idea of an already existing proposition, its interview letter was also listed next to that proposition. Similar propositions were grouped into categories of responses labeled by their topic. Categories were then organized into higher-level themes. Themes were labeled with statements which built upon the categories and propositions within them. The researchers used this procedure to systemically organize the interview data into a hierarchal framework. The full hierarchal framework and descriptions of its organization is included Appendices F, G, and H of this report. The researchers also identified any themes, categories, and propositions which specifically seasoned or emerging leaders commonly stated. From this analysis, the researchers created conceptual theories to explain how leaders in the field viewed the future of nature centers over the next 25 years.

Sub Problem 5: Synthesize viewpoints into a report forecasting the future of nature centers over the next 25 years.

The survey data and the conceptual theories built from the interviews were synthesized into this report forecasting the future of nature centers over the next 25 years. Chapter V discusses these synthesized viewpoints from the leaders of the field and the broader community of nature center professionals. The full ANCA Blue Ribbon report will be available to the ANCA administration and board which will determine in what form the report will be distributed to the ANCA membership. A project update was also published in the winter 2015 edition of the Journal of the Association of Nature Center Administrators in February, 2015. The update discussed the project's methodology and its findings at that point.

CHAPTER IV

RESULTS

This chapter presents the results of the descriptive survey of nature center professionals and the interviews of leaders in the nature center profession. The results are organized sequentially by the sub-problem which they addressed.

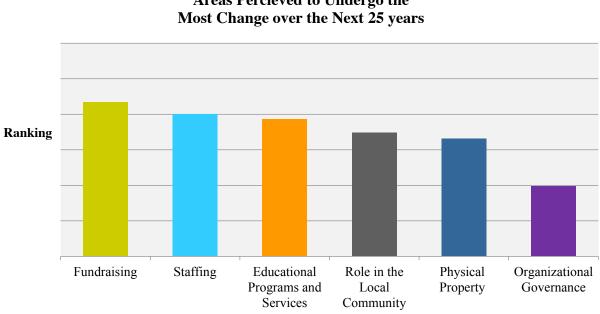
Sub Problem 1: Identify nature center professionals to pursue for research respondents.

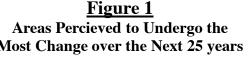
As discussed in Chapter III, the Blue Ribbon project identified the ANCA membership as the most representative sample of the nature center profession. The complete ANCA membership of 559 individuals was determined to serve as the population for the study.

Sub Problem 2: Establish a broad base of knowledge regarding perceptions about the future from nature center professionals.

The Blue Ribbon survey was sent out to the ANCA membership in March 2014. Response to the survey was very successful. 166 of the 559 ANCA members completed the survey for a response rate of 29.7%. The online survey provider Survey Monkey was used to design, distribute, and manage the survey and its data. The survey included Likert-type, multiple choice, and ranking questions. The focus of this study is the next 25 years. However, following a pilot test survey, it was discovered that respondents had difficulty answering certain questions with that time span. For these questions, the time frame of the next 7 years, the standard length of a strategic plan, was used.

The first question on the survey asked respondents to identify which aspects of the nature center profession they perceived as undergoing the most change over the next 25 years. The rest of the survey asked questions exploring change related to those specific areas. Respondents ranked fundraising, staff, and educational programs and services as the top three areas of change respectively. See Figure 1 below:





Role in the local community, physical property, organizational governance were ranked as the three areas undergoing the least change respectively. As an environmental non-profit profession, it is not surprising that the nature center field foresees significant change in fundraising operations. Concerns over funding and new funding sources were also expressed by the respondents to the NSYF study 26 years ago (Simmons & Widmar, 1989b). However, as shown in Table 1 below, responses to specific fundraising questions reveal more detail.

<u>Table 1</u>

| Statement | Strongly Agree | Agree | Disagree | Strongly Disagree |
|---|-------------------|-------|----------|----------------------|
| Your organization will increase the energy and resources it invests in raising funds over the next 25 years. | 47.6% | 42.2% | 7.8% | 2.4% |
| Your organization will raise funds from new sources over the next 25 years. | 46.4% | 50% | 2.4% | 1.2% |
| The effects of the recent economic recession will impact the way your organization raises funds over the next 7 years. | 17.7% | 62.2% | 16.5% | 3.7% |

Perceived Changes to Fundraising

A total of 89.8% of respondents indicated that their organizations will increase the energy and resources they invest in raising funds over the next 25 years. 47.6% of respondents strongly agreed and 42.2% agreed. An even higher 96.4% of respondents indicated that their organizations would be raising funds from new sources with 46.4% strongly agreeing and 50% agreeing. Clearly, ANCA members perceive their organizations investing more resources into fundraising and are keeping their eyes open to tap new sources of funding. In the short term, these fundraising developments may be motivated by the 2008 economic recession. 17.7% of respondents strongly agreed and 62.2% of respondents agreed that the effects of the recent economic recession will impact the way their organizations will raise funds over the next 7 years. A total of only 20.2% indicated that the recession will not impact fundraising (16.5% disagreed).

Respondents ranked staffing as the second area undergoing the most change over the next 25 years (see Figure 1). On the questions specifically related to staffing, respondents indicated a trend towards growth over the next 7 years. See Table 2 below:

| Statement | Strongly Agree | Agree | Disagree | Strongly Disagree |
|--|-------------------|-------|----------|----------------------|
| Your organization's education staff positions will increase. | 35.5% | 38% | 22.3% | 4.2% |
| Your organization's public relations staff positions will increase. | 16.3% | 36.1% | 39.2% | 8.4% |
| Your organization's fundraising staff positions will increase. | 27.1% | 35.5% | 29.5% | 7.8% |
| The role of the director in your organization will be different. | 30.1% | 47% | 20.5% | 2.4% |
| The effects of the recent economic recession will impact your organization's staffing. | 16.5% | 47% | 31.1% | 5.5% |

Perceived Staffing Changes over the next 7 years

A total of 73.5% of respondents indicated that their organizations' education staff positions will increase (35.5% strongly agreed and 38% agreed). However, 22.3% of respondents disagreed and 4.2% strongly disagreed. ANCA members are nearly split on whether their organizations' public relations staff positions will increase. A small majority of 52.4% indicated these positions will increase (16.3% strongly agreed and 36.1% agreed) while 47.6% responded that they will not (39.2% disagreed and 8.4% strongly disagreed). A slightly larger majority of respondents, 62.6%, indicated that their organizations will be increasing their fundraising staff positions (27.1% strongly agreed and 35.5% agreed). 37.4% of respondents indicated these positions would not increase (29.5% disagreed and 7.8% strongly disagreed). A total of 77.1% of respondents also indicated that the role of the director in their organization will be different (30.1% strongly agreed and 47% agreed). Almost two thirds of respondents, 63.5%, indicated that the effects of the recent economic recession would impact their staffing (16.5% strongly agreed and 47% agreed).

ANCA members ranked educational programs and services as the third area undergoing the most change (see Figure 1). Respondents to the programs and services questions generally indicated that program volume will increase. Some indicated that their numbers of programs will remain constant and few indicated they would decrease. See Table 3 below:

Table 3

Perceived Program Changes over the next 7 years

| Statement | Increase | Remain Constant | Decrease |
|---|----------|-----------------|----------|
| Your number of onsite school programs will | 52.4% | 35.5% | 12% |
| Your number of offsite outreach programs will | 77.1% | 19.3% | 3.6% |

52.4% of respondents indicated that their numbers of onsite school programs will increase. Over a third, 35.5%, responded that their number of onsite school programs will remain constant while 12% indicated they will decrease. A larger majority, 77.1%, responded that their offsite outreach programs will increase. 19.3% responded that outreach programs will remain constant and only 3.6% indicated they will decrease. The survey also explored whether nature center programming will target different audiences in the near future. Respondents were nearly evenly split on whether their organizations will change the target audiences for their programs. See Table 4 below:

| Statement | Strongly Agree | Agree | Disagree | Strongly Disagree |
|--|-------------------|-------|----------|----------------------|
| Your organization will change the target audiences for its programs. | 17.5% | 39.7% | 39.2% | 3.6% |

Perceived Change in Audience over the next 7 years

A total of 57.2% of respondents indicated their organizations would change the target audiences for their programs (17.5% strongly agreed and 39.7% agreed) and a total of 42.8% indicated they would not (39.2% disagreed and 3.6% strongly disagreed). Both sides were concentrated around the more moderate "agree" or "disagree" responses: 39.7% agreed and 39.2% disagreed.

While not highly ranked in terms of future change, the questions related to the role of nature centers in the local community provided meaningful data. ANCA members largely responded that their organizations' roles in their local communities and relationships with local school districts will change over the next 7 years. See Table 5 below:

| Statement | Strongly Agree | Agree | Disagree | Strongly Disagree |
|---|-------------------|-------|----------|----------------------|
| Your organization's role in the local community will change. | 27.7% | 48.8% | 23.5% | 0% |
| Your organization's relationship with school districts will change. | 18.7% | 57.8% | 19.3% | 4.22% |

Perceived Change in Role in Local Community over the next 7 years

A total of 76.5% of respondents indicated that their organizations' roles in the local community will change. 27.7% strongly agreed and 48.8% agreed while 23.5% disagreed and no respondents strongly disagreed. The responses regarding relationships with local school districts were very similar. A total of 76.5% of respondents indicated that their organizations' relationships with school districts will change (18.7% strongly agreed and 57.8% agreed). A total of 23.5% indicated their relationship will not change (19.3% disagreed and 4.22% strongly disagreed).

Physical property was ranked second to last in terms of change over the next 25 years. As shown in Table 6 below, responses to questions about planned change to the physical property of nature centers were mixed.

| Statement | Strongly Agree | Agree | Disagree | Strongly Disagree |
|--|-------------------|-------|----------|----------------------|
| Your organization is planning to acquire new land. | 12.7% | 24.1% | 31.3% | 31.9% |
| Your organization is planning to construct new buildings. | 27.1% | 28.3% | 27.1% | 17.47% |
| Your organization will focus on retrofitting its buildings to become more sustainable. | 23.5% | 54.2% | 16.9% | 5.4% |

Perceived Change in Physical Property over the next 7 years

Respondents whose organizations are planning to acquire new land over the next 7 years were in the minority. A total of 36.8% of respondents indicated their organizations are planning to do so (12.7% strongly agreed and 24.1% agreed) while a total of 63.2% of respondents indicated that their organizations are not (31.3% disagreed and 31.9% strongly disagreed). Responses to whether their organizations are planning to construct new buildings were nearly evenly distributed across the Likert scale: 27.1% strongly agreed, 28.3% agreed, 27.1% disagreed, and 17.47% strongly disagreed. There was a clearer majority of responses regarding whether respondent organizations are focusing on retrofitting current buildings. A total of 78.7% indicated that they will be focusing on retrofitting (23.5% strongly agreed and 54.2% agreed) while 22.3% indicated that they will not be (16.9% disagreed and 5.4% strongly disagreed).

The survey also asked respondents about their current and future relationships with friends groups. Respondents were asked to select all statements regarding their relationships with friends groups over the next 7 years with which they agreed. Table 7 below displays the rates of agreement of the respondents:

| Statement | Agree |
|--|-------|
| A relationship with a friends group currently exists with your organization. | 42.2% |
| Your organization plans to create a relationship with a friends group. | 4.2% |
| Your friends group will become a larger source of income for your organization. | 32.5% |
| Your friends group will become a smaller source of income for your organization. | 2.4% |

Perceived Relationship with Friends Groups over the next 7 Years

42.2% of respondents indicated that their organization currently has a relationship with a friends group. Only 4.2% of respondents indicated that their organizations plan to create such a relationship over the next 7 years. 32.5% responded that their friends group will become a larger source of income while only 2.4% responded it will become a smaller source of income over the next 7 years.

As discussed in the literature review, the ANCA Blue Ribbon project identified the 2008 economic recession as a potential factor impacting the future of nature centers. Thus, the survey also asked Likert questions regarding the perceived effect of the recession on future development. Tables 1 and 2 above display responses to questions regarding the future impact of the recession on fundraising and staffing. Table 8 below shows response to questions relating to the impact of the recession on strategic planning and vision.

| Statement | Strongly Agree | Agree | Disagree | Strongly Disagree |
|---|-------------------|-------|----------|----------------------|
| The effects of the recent economic recession will impact the strategic direction for your organization. | 17.1% | 52.4% | 26.8% | 3.7% |
| The effects of the recent economic recession have impacted your organization's vision. | 11.6% | 34.1% | 44.5% | 9.8% |

Perceived Effect of the Recent Economic Recession over the next 7 years

Responses regarding the future impact of the recession on strategic planning were very similar to those regarding the recession's impact on fundraising and staffing. Like for fundraising and staffing, the majority of respondents indicated that the recession will have an impact: 17.1% strongly agreed and 52.4% agreed. However, nearly a third of respondents indicated the recession will not have an impact on strategic planning: 26.8% disagreed and 3.7% strongly disagreed. Responses regarding the recession's impact on organizational vision were nearly evenly split. A total of 45.7% of respondents indicated the effects of the recession will have an impact on organizational vision over the next 7 years while a total of 54.3% indicated it will not. Both sides were concentrated around the more moderate "agree" and "disagree" responses: 34.1% agreed while only 11.6% strongly agreed and 44.5% disagreed while only 9.8% strongly disagreed.

The Pearson product moment correlation test was applied to the survey data to test for any moderate or strong correlations between responses. The tables below display all correlations in the data with r-values greater than 0.50 and less than -0.50. R-values from 0.50 to 0.69 and from -0.50 to -0.69 represented moderate correlations. R-values greater than 0.70 and less than - 0.70 represented strong correlations. Tables 9, 10, and 11 below display all correlations within that range of r-values regarding fundraising, staffing, and impacts of the recession respectively. The statements have been abbreviated within these tables for readability.

Table 9

Correlations between Survey Responses regarding Fundraising

| Statement 1 | Statement 2 | r-value |
|--|---|---------|
| Increase energy and resources invested in raising funds over the next 25 years | Fundraising staff positions will increase over the next 7 years | 0.67 |
| Increase energy and resources invested in raising funds over the next 25 years | Raise funds from new sources over the next 25 years | 0.66 |

The data displayed positive moderate correlations between increased investment in fundraising over the next 25 years and an increase in fundraising staff positions over the next 7 years (r =

0.67) as well as raising funds from new sources over the next 25 years (r = 0.66).

Table 10

Correlations between Survey Responses regarding Staffing

| Statement 1 | Statement 2 | r-value |
|--|--|---------|
| Education staff positions will increase over the next 7 years | Public relations staff positions will increase over the next 7 years | 0.59 |
| Education staff positions will increase over the next 7 years | Fundraising staff positions will increase over the next 7 years | 0.52 |
| Public relations staff positions will increase over the next 7 years | Fundraising staff positions will increase over the next 7 years | 0.67 |

There were also positive moderate correlations between an increase in education staff positions and an increase in both public relations (r = 0.59) and fundraising positions (r = 0.52) over the

next 7 years. A slightly stronger positive correlation existed between an increase in public relations staff positions and an increase in fundraising positions (r = 0.67).

<u>Table 11</u>

Correlations between Survey Responses regarding the Recession

| Statement 1 | Statement 2 | r-value |
|---|---|---------|
| Recession will impact strategic planning over the next 7 years | Recession will impact fundraising over the next 7 years | 0.67 |
| Recession will impact strategic planning over the next 7 years | Recession will impact staffing over the next 7 years | 0.63 |
| Recession will impact strategic planning over the next 7 years | Recession will impact organizational vision over the next 7 years | 0.58 |
| Recession will impact organizational vision over the next 7 years | Recession will impact staffing over the next 7 years | 0.57 |

Positive moderate correlations existed between the recession impacting strategic planning over the next 7 years and the other recession-related variables investigated. Responses indicating the recession's impact on strategic planning showed positive correlations to the recession impacting fundraising (r = 0.67), staffing (r = 0.63), and organizational vision (r = 0.58). The recession impacting organizational mission over the next 7 years only had a correlation with the recession impacting staffing (r = 0.57).

Sub Problem 3: Identify leaders in the nature center profession with experience in strategic planning for centers.

13 seasoned leaders were identified from the list of ANCA with 15 or more years of experience in an executive director role. Two of the sampled directors did not return requests for interviews. The list was resampled and two directors who accepted interview requests were identified. The survey produced seven emerging leader nominees. One of the nominees was new to nature centers, but had a wealth of experience as a director outside the nature center field. The informant was classified as a seasoned leader. Thus, the project identified a total of 14 seasoned leaders and 6 emerging leaders.

Sub Problem 4: Develop an understanding of what leaders in the field view as the future of nature centers over the next 25 years.

This section of the results presents the qualitative data from the interviews of seasoned and emerging nature center leaders. The interviews produced 231 unique propositions related to research concerns. These propositions were then organized into a conceptual framework of categories and themes. The conceptual framework is shown below. Themes are labeled with bold numbers. Corresponding categories are listed beneath them. A narrative description of each category follows the outline. A full list of all propositions, subcategories, and categories are included in Appendices F, G, and H respectively.

Conceptual Framework

- 1. Nature centers will need to establish relevancy in an increasingly nature disconnected society.
 - 1.1 Relevancy with emerging environmental issues
 - 1.2 Relevancy within the community
 - 1.3 Relevancy with new technology

2. Nature centers will adapt funding for day to day operations and long-term sustainability.

- 2.1 Get leaner
- 2.2 Diversify program offerings
- 2.3 Diversify income
- 2.4 Increases in Fundraising
- 2.5 Promote the value of nature centers
- 2.6 Create authentic partnerships

3. Nature center programming will evolve.

- 3.1 Lifelong learning
- 3.2 Authentic programming
- 3.3 Expansion beyond school programming

4. Nature center professionals will develop modern skill sets.

- 4.1 Staff Development
- 4.2 Board Development
- 4.3 Executive Director Skill Set

5. Nature centers will strengthen their properties.

- 5.1 Opportunistic Increases to Land Base
- 5.2 Site Management
- 5.3 Facilities
- 5.4 Nature Centers as Urban Oases

Themes and Supporting Categories Narrative

This portion of the results presents a description of the themes and categories by paraphrasing and quoting the perceptions and ideas of interview participants. Often, a quotation from one interview is used to represent the similar views of multiple respondents. The purpose of this section is to display the richness of the qualitative data collected and thus allow the reader to more easily follow the logic of the analysis.

Theme 1: Nature centers will need to establish relevancy in an increasingly nature disconnected society.

1.1 Relevancy with emerging environmental issues

Leaders in the nature center profession emphasized the need for nature centers be relevant to changes in the natural world. 65% of the directors interviewed discussed how nature centers must keep pace with emerging environmental issues. Several directors spoke about how the environmental issues facing society today are completely different from those that we faced when the nature center movement began. Many expressed the need to "be able to keep up with the science of the day and not just interpret things in a general sense, but be relevant to the extraordinary amount of change in the environment." They stressed how nature centers must broaden their scope "beyond natural history" to continue to be relevant over the next 25 years.

15% of directors discussed focusing on restoration in the future. These directors described how their centers are committing not only resources but programming towards land restoration. They perceive restoration as both a modern environmental concern and an avenue for fostering personal connections with nature:

We are really honing in on planting trees and restoring the forest and teaching kids that the seed they plant today is a tree they'll walk under with their grandchildren. So really make them find a place. We have found and recent research has shown this too that if a person can touch it and feel it and really indulge all their senses in it, then they love it. And what they love they protect and usually they fund as well when that becomes available.

They are also aiming to export a restoration ethic to their communities: "We are looking to be an example to land owners to manage their property towards having healthy ecosystems that are appropriate for the area."

20% of directors are focused on conservation. Several are working to "truly turn into a conservation organization" that provides not just environmental education, but conservation education as well. These directors are focused on water, wildlife, and land conservation at their centers. Similar to those focused on restoration, these directors are striving to build their reputations as conservation leaders and then share those skills with their communities. They see their centers providing services as consultants for private land owners working on conservation projects. Some also discussed partnering with land owners to develop land trusts.

Several directors discussed how they perceive sustainability as an important emphasis for their centers in the future. They are starting programs focused on food systems and farming: "We are expanding into the realm of agriculture and how our education programs can touch kids not just going out into the wild nature, but being able to know where food comes from."

Many of the directors who stressed relevancy to modern environmental concerns also identified climate change as a significant force affecting the future of nature centers. 25% of all directors interviewed highlighted climate change as a factor. One director directly stated serious concern about this issue: "In 25 years, I'm not a climatologist, but we could be right in the middle of the enormously scary crisis that is unfolding." Many directors see nature centers' roles as both centers of information and education regarding climate change. Some are clear that they will be "doing a lot of the dissemination of information" and providing their communities access

to experts. However, others are asking, "How do we provide the research and the education for the local people so that they can be as resilient as possible in their planning and building?" as well as, "How do we work together as a collaborative to best understand how climate change is affecting our community?" Some directors foresee nature centers taking on an advocacy role. 15% of directors specifically pondered and discussed advocacy: "We dabble in advocacy, but in a time of crisis we may be looking at a different thing." They are pondering whether "it could be that our role is more activist." However, other directors maintain that they do not see advocacy becoming a part of the nature center profession. Whether these directors are focused on restoration, conservation, sustainability, and/or climate change, they all emphasized, "It's not just about environmental education anymore. We need to have places where people grapple with change and solve problems in their communities."

1.2 Relevancy within the community

The majority of directors, 75%, highlighted that their centers must become more essential to their local communities. Several directors identified how "they don't hold the same weight that they did back in the 60's, 70's, and 80's in terms of how important they are to the community." They are all focused on how to become a more "relevant part of the dialogue and fabric of the community."

20% of directors expressed that they will be working to engage the local community into seeing their centers as important resources. These directors desire for their centers to become community "gathering spaces" and "anchor institutions" on par with churches and museums. To achieve those levels of prominence in their communities, many directors discussed that they will be working to raise the awareness of the value of their centers: "A lot of work here is trying to

raise the community awareness about how important natural spaces are and how vital nature centers are in protecting them." Several indicated that they need to think bigger with their messaging to be relevant in their communities.

30% of directors also spoke about the importance of truly serving their communities. They specifically discussed providing programs and experiences for adult and culturally diverse populations. Several directors called for reciprocal multicultural programs that truly engage and meet the needs of the community:

We have been trying for years in this business to reach out and better serve diverse audiences. But I think we have forgotten about the reciprocal nature of the groups that we serve and that means that we should be seeking or continuing to be seeking input and letting our audiences, whoever they may be, help shape the programs that we are trying to produce. I think the trend towards looking to have a reciprocal relationship, particularly with multicultural diverse audiences is pretty important.

These directors emphasized that serving everyone is vital to the relevancy of nature centers in their communities. Several directors specifically underscored the important of reaching multicultural audiences: "The demographic changes are so profound in our country that to ignore what that means in any of this, you do that at your peril." They perceive that learning about and adapting to the wants and needs of the community will engage more diverse audiences typically disconnected from nature centers.

25% of directors also called for the nature centers to have a greater influence in their communities. 15% are working to develop "active partnerships" in their local communities to increase their reach:

That's another thing we're looking at in the short term is how do we leverage other nonprofits or other agencies in the local community so we're not trying to do this by ourselves. That has been huge for our success. If we weren't everyday thinking about who we can partner with, who we can share resources with, frankly I don't think we'd be here. Other directors are encouraging their staff to be involved in other organizations either as volunteers or board members.

Leaders in the profession still foresee nature centers' primary role in their communities as championing experiences in nature. Directors described that the nature centers of the future will still be the primary places in their communities for environmental education. Many perceive their role in fostering a "sense of place" as continuing to grow as urban and suburban sprawl continues to develop more land in their areas. Several directors foresee the environmental services nature centers provide becoming more vital to their communities in the future:

But more and more I think people like myself recognize we play a more profound role in trying to maintain not only the physical but even sort of the mental and spiritual health of the communities we operate in.

1.3 Relevancy with new technology

30% of the directors discussed the importance of staying relevant to the increasing integration of technology into American society. Most propositions focused on the use of social media and information technology. Directors identified how the nature center profession has lagged behind in its embrace of technology, but that centers are now coming around:

Our field has a tendency to fight against technology and I've been one of those people. I had no idea that social media could have such an impact. But I can see that now. I can see the collective knowledge that students and adults can share. That's going to change and we have to be on the cusp of that.

Several directors asserted that we now live in now a "technology driven society" where technology is interconnected with learning. They are looking for effective ways to incorporate information technology into programming: "If we can't get those kids to put their iPads or iPhones down then let's bring them into the field and use them." Another director asked, "How else are we going to get to the students?" These directors are also contemplating how to incorporate technology in the nature center business model. They are considering how to make technology "a tool to move our message forward."

Theme 2: Nature centers will adapt funding for day to day operations and long-term sustainability.

2.1 Get Leaner

25% of the directors interviewed discussed how their centers have experienced continued pressure on funding. For some, that pressure has resulted from the prolonged impacts of the 2008 economic recession:

We are still in a post-recession even though we had a pretty big rebound of wealth from the stock markets. People that give, whether those are foundations or wealthy individuals, our patrons are still really gun shy. So I think volatility in the markets has put pressure on raising money for our causes in as much as there's still a lot of hesitation in the market.

Directors identified a variety of recession-related impacts including that "traditional major donors and foundations have diverted toward urgent needs," that there is less government funding available, and that they are "not sure donors will be as supportive towards long term investing." Some centers were sheltered from the recession due to the strength of the regional economy. Others explained that "it's gotten better since 2008." But nearly all of these leaders maintained that nature centers "can't get too comfortable."

Directors experiencing these pressures emphasized that "getting as lean as possible" is vital to weathering the current and continued economic storm. They discussed how they have "modified things to be as fiscally responsible as [they] can" by making efforts to "find every leak, every little chink that's not filled and fill that in." These directors are cutting back where possible: "We have to cut out as much fluff and chaff as we can." One director explained that their budget is "so incredibly streamlined that it is almost to the bone." They are scrutinizing not only expenses but "everything that we do." 20% of directors explained that they are streamlining their programming down to those that are most marketable:

We narrowed our program offerings from, I think we used to be offering 15 different programs to 5 different programs now and marketing directly to entire grade levels and then corporate support to offset some of that. It's a lot easier to go to the school district and say, you know, we have corporate support that will pay for every sixth grader to come.

Other directors are reducing their volume of travel and outreach programs. 20% explained that they have "retracted to their core principles and become sharper focused" as organizations.

2.2 Diversify Income

While some directors explained how their centers are cutting back to endure the financial strain, others emphasized diversification. 45% directors discussed how their centers are diversifying their revenue streams by "doing more and offering more." This strategy has helped some directors' centers thrive: "We've been able to weather the financial climate we've had really nicely compared to a lot of other places because we diversified our programs so much." These directors are expanding their target audiences: "No one audience is going to be the bread and butter of our organization anymore." They are offering more adult, family, and community programs:

I think reaching out to family programs for example or more adult seminar types those sorts of things has been an ongoing desire and trend of most nature centers that I know of and I think it's happening more now than it did 15-20 years ago. So that's one big trend. For some directors, providing more diverse programming is in an effort to hedge their bets against predominantly relying upon school programs.

Directors are also planning to increase earned income through increasing facility rentals for corporate and private events. Others are providing more teacher development programs: "The

reason schools are bought in is because we also do teacher development and curriculum development as a part of that grant. So we're actually going into the classrooms and teaching teachers how to use our curriculum to meet their standards."

2.3 Increases in Fundraising

65% of the directors interviewed foresee donations as growth areas in both the short-term and long-term future. They perceive annual giving and individual gifts increasing. Several directors predicted that "charitable giving will equal deliverable." 40% of directors projected that planned giving will increase, especially from baby boomers. These directors explained that portions of their constituents are "at that age when they're thinking about how they leave their money to the next generation." Several of these directors are planning to leverage planned philanthropy through a focus on land conservation: "There is a strong case for catching these legacies, especially when we're talking about conservation."

2.4 Promote the Value of Nature Centers

30% of directors interviewed identified promoting the value of nature centers as crucial to the success of the field in the short-term and over the next 25 years. The directors emphasized that centers "need to do better at helping others see the value of what it is that happens at these centers." Most discussed the importance of communicating a narrative of how nature centers are specifically addressing environmental needs and filling niches. Some are focused on showing their value to school systems: "Public schools in particular don't see the value and they don't necessarily calibrate that value with other things they spend their money on." Others are concentrating on communicating value to their donors: "A lot of times the donors need to be brought along to better understand what those program outcomes are. We really have to be able

to explain that in a really crisp way to them." Both groups emphasized the need for more research investigating the value of nature center programming: "Some of this comes from the need for ongoing evaluation and outcome research." They also commonly noted that evaluation research is difficult to produce: "We've all been chasing it for years. But when you're busy running a center, it's really hard to do good research."

2.5 Create Authentic Partnerships

50% of the directors interviewed spoke about the importance of creating authentic partnerships to the growth of the nature center field. One director encapsulated the thoughts in this category when they said, "We need to unite at some level and find ways to have a collective impact." For 20% of the directors, the desire to create partnerships is driven by the donor community increasingly looking to invest in collaborative efforts: "I think funding sources, foundations and granters, are really into partnerships and really into how their dollar can be stretched through several organizations." They see these collaborations as key to the future financial growth of centers:

We're all trying to, in most cases non-profit organizations, raise money from a set of donors. This is one of the smallest philanthropic kind of segments in the philanthropic community, that is environment. In many cases, we're competing for the same donors. We've got to figure out ways to collectively work together to scale up what we're doing in the eyes of donors and others or at least have that conversation. I guess we've begun to have that over the last several years and a bunch of folds are doing a variety of different things. But I think there's a greater need and strategies that need to be developed to help overcome those financial hurdles that exist for every nature center that I know of.

These directors discussed how they will be developing strategic partnerships with other nature centers as well as school systems, businesses, and non-profits in both their local and regional communities in the future. Several directors commented that finding time to develop such partnerships amongst the other responsibilities of running a nature center is difficult. They also

underscored that they are focused on authentic partnerships that truly "grow the pie" for all parties.

20% of directors also spoke about the potential for nature centers to band together to not only increase funding, but have a larger collective impact on society. These directors envisioned "collaborations that look to have a broader impact which can do something that one organization can't do alone." One director in particular described this vision of a nature center consortium:

It's like that story of a bundle of sticks. It's a lot easier to break one stick, but if you put a bundle of them together you can't break them. That's how I see us locally. Five nature centers could hold a lot of weight especially in the capital city. If we could put together a consortium, start to work with politicians on conservation issues, we could carry a lot more water on the environment than what we're doing as five individual centers. I'm not saying we should all have the United States Environmental Education Corporation or anything, but I do think that we do have to start leveraging each other's resources in a slightly different way where we're looking for those different collaborative collective strategies that really try to do big things rather than how am I going to pay the bills next year. That's one thing I know you might consider a trend as well and more people are talking about it.

The directors who discussed this larger collaborative idea all spoke about it as a currently undeveloped concept. But they also indicated that it will become an impactful trend: "I think it's going to be a pretty key strategy for the future."

Theme 3: Nature center programming will evolve.

3.1 Lifelong Learning

50% of the directors interviewed identified targeting all ages as a significant way that nature center programming will develop over the next 25 years. Directors are expanding their target ages in different directions. 40% of directors are focusing on adult programming. They are seeking to "raise the environmental literacy of adults" with "adult nature camps" as well as programs for adult leadership skills and for the elderly. 25% of directors are working to "figure out how to reach junior high and high school level" students. Several directors discussed how their centers are shifting programming to secondary school students:

Now our program has changed from mostly fourth and fifth grade to middle school and high school. About 50% of our programs are middle school and high school now. So that change has already started and I thought, well, if we're really going to make a change, and I've been taught for years and years in this field that you got to get kids in fourth and fifth grade; that's when they make their decisions. What I'm finding through our experiences over the last three years is that these high school students want to go to a location and learn hands on.

Some of these directors envisioned creating programs for college students: "I think we have a role to play as nature centers to try to bring that back and try to reinvigorate the higher ed at some level. Again, that's maybe a trend I'd like to see happen if it's not already beginning." Several directors explained that this expansion of target age groups is a reaction to changes in the public school system: "We created early childhood curriculum for fourth, fifth, and sixth graders so that we can start bringing in ages that still do field trips."

Nearly all directors who discussed expanding target ages emphasized the importance of lifelong learning. 30% of directors indicated that they are striving to "be more than just a one shot deal for most people." Directors are seeking to answer the questions "how do you reach someone at every stage in their life?" and "how do we reengage that audience and begin to have multiple contacts with an individual starting at younger ages?" For 30% of the directors, part of the answer to those questions is nature preschools. These directors perceive nature preschools as the entry way to lifelong learning:

The premise of it is that most people who we think are conservation minded in value and the environment and nature formed a personal relationship with it along the line—a lot of us before we even knew about it. So the premise of the nature preschool is exactly that: getting that relationship going at a particularly important time in their development where it just gets incorporated into their world view...

One director described their nature preschool as having a "tsunami of interest" from their local community. Another portrayed preschools as a "wave that will catch more and more centers." These directors are passionate about nature preschools' potential to foster in their students a lifelong commitment to the environment:

I love that we do it because (a) I think it's innovative, and (b) I think that the research will show eventually that it's predicated on a pretty cool concept of trying to really create real champions. These are going to be the people who we hope are leading organizations and champions for the environment going forward.

3.2 Authentic Programs

30% of directors interviewed emphasized the importance of nature centers providing authentic programming in the future. Several noted that foundations are becoming more targeted and specific with the outcomes they are looking to fund: "They want to create environmental leaders. It needs to be more in depth with kids that you can actually affect." As a result, these directors are working to create programming that more deeply investigates environmental issues and creates "real champions" of the environment: "We also want to provide more opportunities for kids to get more in depth so that we can actually work on creating environmental leaders." For many of these directors, more in depth means issues analysis: "I think there's a real potential to have this higher goal level environmental education discussion of issues analysis." 20% of directors interviewed expressed that they are planning to trade "one-off field trips" for more intense and long programs.

One way these directors plan to promote authenticity is through integrating field research into their education programs. 20% of directors interviewed discussed more strongly implementing citizen science at their centers. 20% also spoke about creating and strengthening partnerships with local colleges. They are looking to bring graduate students and professors to

their centers to conduct scientific research and have school children or community members work alongside them:

For example, our researcher today who's out there, Steve, is doing a snake survey. So we've got a group of students and he's actually letting the students help him measure the snakes. So the students, even in our other programming, are mimicking the work that other researchers are doing. And they actually are.

One director in particular sees field research as being core to the role of the nature centers of the future: "My prediction is that 25 years from now that nature centers will be a hub of real research and site specific focus. They could be a hub, almost like a clearing house for some of that data. I mean that might be a far off concept."

3.3 Expand Beyond School Programming

The majority of the directors who discussed fostering lifelong learning, authentic programs, and increasing program offerings also expressed a desire to expand beyond school programming. 50% of the directors in this study spoke about nature centers evolving beyond the classic school programs model. The directors largely explained that they are not planning to dissolve their current school programs, but they are not necessarily a priority for the future: "It doesn't mean we cast the old nature study aside, it just means there's a balance." But they are contemplating how to move beyond: "We're not abandoning it as much as we are trying to look at the horizon for what the next model is." For some, this shift is connected to a decline in school programs:

We're still going to continue seeing a decline in school groups for example just because of the limitations placed on schools and how we're trying to counteract that is by offering other programs... While we lost the formal school programs in the 11-17 age group, now we're able to augment that with our own programming.

Others described how the cost of school programs is pushing them to look elsewhere:

Our school programs, they've never been lucrative. By the time you add in all the costs of running these things, they aren't money makers. They're actually supported by our donor base in some ways. So we're not putting a huge focus on school programs right now.

But the majority of these directors perceive the current school program model as stagnant in some way. Many are considering with a critical eye the impact school programs have on the lives and actions of students. One director in particular expressed this sentiment very clearly:

I have a level of dissatisfaction. They are very mature products. We're doing the same things we did essentially thirty and forty years ago: bring them here, hike them through, and make it thematic. We tie it to teaching standards. And just because it's mature doesn't mean it isn't a good product. But it's not exactly overflowing with innovation and it hasn't really changed with the times. And so a lot of people are trying to figure out, "What are we doing with these things?" Are they really moving the needle at the end of the day with these people?

The directors in this category did not provide specific examples of what that next model of anchor programing might be for nature centers. Several expressed that they are looking to change markets from school programs but asked "to what?"

Theme 4: Nature center professionals will develop modern skill sets.

4.1 Staff Development

When asked questions about how staffing will change over the next 25 years, the leaders in the field emphasized professionalism and growth. 30% of the directors described how they perceive nature center staffs growing to become more professional. Several directors explained that they will be fostering professionalism through the hiring process: "I will hire for somebody that has a high skill set in the area we're looking for." 20% of directors discussed providing staff more training. These directors foresee their staffs continuing to take on more responsibilities within their organizations: "Staff have more hats than they used to." Some directors discussed nurturing staff into administrative roles. The directors explained that they staffs must wear more hats in order for the organization to become more adaptable to future changes: "More training and staff development will help us be as nimble and as flexible as we can."

30% of the directors indicated that their centers will be increasing the size of their staff. Several of these directors linked future growth in staff to growth in programming: "If we're going to add more programming, our staff has to grow." Two of these directors specifically discussed hiring a development director. They explained that a development director is key to the strategic goals of their centers: "You have this expense, but in the long term it's going to pay off." They identified that this position would facilitate growth in programming and develop the center's role in the community.

20% of the directors discussed how they foresee a generational shift coming for nature center staffs. They explained that retirements in the near future will impact their staffs. They will be concentrating on "integration of older with younger staff" as well as "understanding of generational workforce differences." One director specifically discussed how the new generation of education staff are entering the field with a different set of skills than in the past:

A lot of times students or recent graduates of programs go into a naturalist internship where they're then asked to teach and in many cases a lot of them are learning field skills and field identification and those sort of basic natural history pieces as naturalist interns after their undergraduate degree. Like I said, not many of them get that sort of experience as undergraduates. So that's another observation I've made over the years. That's a little bit different than it was fifteen years ago where the incoming staff for those seasonal or short employment situations at nature centers... had a different skill set in many cases than they do now. Not necessarily better or worse but just different. It's a different sort of world in that way.

4.2 Board Development

Nature center directors provided a wide array of perceptions regarding how governance will change over the next 25 years. Their responses were typically tied to the current structure and state of their boards. One director emphasized, "If you've seen one board, you've seen one board. They're all unique." However, some common threads did emerge. Directors are focused on growing the development capabilities, fiscal skills, and diversity of their boards. 40% of directors discussed developing the capacity of their boards to move their organizations forward: "If you don't have a strong board, it's not that you can't sustain what you're doing but it becomes very difficult to grow. So having a board that is really capable is pretty key to the success of the organization." Thus, these directors are working to foster "sharply focused boards that help get nature centers to their next level of development." Only 10% of the directors indicated that their organizations have developed mature governing boards and that they do not foresee future growth.

For most of these directors, a major aspect of sharpening their boards is developing their abilities to martial resources. 20% of directors interviewed emphasized the importance of developing the fiscal skills of their boards. Several directors indicated that their boards "need more business and industry leaders." They explained that they need board members with greater financial abilities and vision as their strategic planning is becoming more sophisticated.

20% of the directors emphasized the importance of diversity on their boards for the future growth of their centers. These directors discussed attracting board members who are diverse in a variety of ways: "We worked really hard in making sure that our board was diverse in professional backgrounds but also socioeconomic backgrounds, financial abilities. You name it,

we really went out and worked hard at it." Some of these directors also mentioned the importance of generational diversity on their boards: "you still need to get younger people."

20% of the directors highlighted the need for nature centers to build boards that are truly representative of their communities: "One of the things I think is important though is again trying to have the board reflect the communities that you serve. In other words, that might be multicultural, that might be a variety of different things." Nearly all the directors who discussed growing the diversity of their boards, always reemphasized that fundraising will still be the most important responsibility of a board member: "At the same time recognizing that the board has to be able to martial resources."

4.3 Executive Director Skill Set

The leaders in the nature center profession perceive executive directors growing as business leaders, public voices for the environment, and fundraisers over the next 25 years. 40% of the directors interviewed emphasized that executive directors will have a greater role in maintaining the financial stability of nature centers. They discussed the need for the directors of the future to have more fundraising experience, be "even more dollar conscious," have "business training," and to "know how to run a business." Several directors stressed that executive directors must have greater entrepreneurial skills in the future: "They have to be more flexible moving into the future. I think they have to be able to see opportunities and maybe seize them in a way maybe they hadn't in the past."

As a result of this emphasis on business skills, many directors foresee individuals entering executive director positions at nature centers from outside the profession: "The next generation of leader may not be coming from the ranks of the profession." Some wondered if the

director positions of the future will require a background in natural resources or natural history: "I don't necessarily think that a nature center director of the future will have to have that degree; have to have that biology degree or that environmental ed degree." However, several foresee more of a balance in the executive directors of the future: "They're going to have a real breadth of experience in the business and in the nature part." These directors still emphasized the significance of true passion for environment and for education in the executive directors of the future.

35% of directors indicated that executive directors will become stronger public voices for the environment in the future. They explained that "it's the director's passion that drives the organization." But they also foresee executive directors being more outspoken about environmental issues beyond nature centers: "Directors should be politically savvy and involved in community planning outside the boundaries of the nature center property." 15% of directors specifically stressed that executive directors should be more involved in local and national policy issues. One director posited that the executive directors of the future may take on more of a "community organizer" role.

30% of directors described how the executive directors of the future will develop as fundraisers. They see directors becoming "less hands on" with the day to day administration of nature centers and more engaged with creating relationships with funders. These directors discussed executive growth in networking and donor cultivation, specifically high level donors. Several directors used language such as "authentic," "true," and "friendship" when discussing the relationships that executive directors make with funders. One director epitomized this type of response:

I think the most important role of the executive director is to develop true relationships, and for me those relationships are honestly friendships. These are people who have the same belief system the same desires, the same passions. I mean I love them. Some of them have become my dear friends. And so I want my time freed up so I can continue to develop those relationships and those friends.

Theme 5: Nature centers will strengthen their properties.

Directors also provided diverse perceptions of how the physical property of nature centers will change over the next 25 years. Many expressed site-specific attributes impacting their centers that differentiated responses. However, several trends existed in the responses.

5.1 Opportunistic Increases in Land Base

50% of directors interviewed indicated that their organizations will be acquiring more land over the next 25 years. The majority of these directors explained that "there will be a greater demand for land" as their centers continue to develop and grow. These directors are looking to acquire more land for a variety of purposes including current program use, satellite properties, retreat areas, conservation, restoration, and farm programs. Several of these directors noted the progress of urban and suburban sprawl as a force compelling their centers to obtain land. These directors are alert for viable opportunities to acquire the remaining land in their communities: "As opportunities arise, we aggressively pursue them because the one thing they ain't making more of is land." Conversely, 20% of directors interviewed indicated that their organizations are not looking to obtain more land in the future. Several of these directors explained that their centers are "landlocked" and thus "unable to add land."

5.2 Site Management

20% of directors discussed focusing on site management priorities when asked how their land base would change in the future. The majority of these directors discussed restoration projects to remove invasive plant species and replant native species. Most also described how their centers are engaging the public in stewardship projects on their lands: "We're putting a lot of volunteer effort into rehabbing the environment if you will. You know, converting back into what would have been here." One of these directors explained how their site management projects have generated donations:

What we're found is that by showing the strength in those areas, that's where we're getting some of our donations coming in too. Because of course the people who care about nature, they see us taking care of it and they want to support that.

5.3 Facilities

35% of directors indicated that there is a need "to build more facilities or have larger facilities." Most explained that new buildings will be needed to meet the needs of their growing organizations. The directors cited different facilities to build including visitor centers, offices, nature preschools, retreat buildings, trailheads, and parking. Most of these directors discussed building new facilities as a farther off goal: "That might be a good 20 years out so that's in the 25 year plan" and "I think down the road though. I'm talking probably 10 years for my board to consider getting larger." In the shorter term, 20% of directors responded that they will be "catching up on deferred maintenance and minor modifications" to their facilities. 10% of directors discussed moving toward simpler facilities. They emphasized "thoughtful architecture" that is "very light on the land" but still resilient. They mentioned open air screened pavilions, yurts, and other simple yet resilient structures. One director asserted that simpler facilities are

"the greenest architecture of all!" Only one director indicated that their organization will not be building new facilities in the future.

5.4 Nature Centers as Urban Oases

When discussing how nature center properties will develop, several directors spoke about the influence of urban and suburban sprawl in their communities. They described how sprawl has shifted the role of their centers from outposts of nature outside cities to islands within them. One director in particular spoke about this change:

Discussing our centers not as a getaway but as an urban and suburban oasis is more and more relevant... I think traditionally, we thought of nature as this unspoiled untouched land and you tried to get one relatively close to an urban area, but it was ordinarily the beginning of the wild lands in a sense. But now, these metropolitan areas are pretty spread out and if you did that, you're pretty far from the city corner and you wouldn't be accessible to a lot of the population. So our platform is more likely to be in a place that is with an island of sorts of an oasis within a sprawl, rather than in the beginning of the preserved countryside as it were.

These directors did not necessarily disapprove of this shift. In fact, they explained that it in some

places, it has and will create opportunities for the creation of new nature centers.

Differences between Emerging and Seasoned Leader Data

There were differences in how the emerging and seasoned leaders responded to the interview questions. Table 12 below, presents propositions which at least 50% of emerging leaders discussed in the interviews. It compares the percentage of emerging leaders who discussed that proposition with the percentage of seasoned leaders who did. These percentages are referred to as response rates.

Table 12

| Sub-category | Emerging Leader Response Rate | Seasoned Leader Response Rate |
|---|----------------------------------|----------------------------------|
| Staying on the cusp of technology | 50% | 21.4% |
| Incorporate climate change into programming | 50% | 14.3% |
| Collaborate with other non-profits in the community | 83.3% | 7.1% |
| Create a consortium of nature centers | 66.7% | 0% |
| Promote the value of nature centers | 50% | 21.4% |
| Expand beyond school programming | 83.3% | 21.4% |
| Target all ages | 66.7% | 28.6% |
| Adult programming | 83.3% | 21.4% |
| Connect authentic field research with education program | 50% | 7.1% |
| Citizen science | 50% | 7.1% |
| More issue based programming | 50% | 28.6% |
| Need to build more or have larger facilities | 63% | 7.1% |
| Volunteer effort into rehabbing the environment | 50% | 0% |

Comparison between Emerging and Seasoned Leader Responses

For all propositions which at least 50% of the emerging leaders discussed, emerging leaders had a larger response rate than seasoned leaders. The difference in response rates was at least 21.6% for all of these propositions. The average difference in response rates for these propositions was 47%. The largest difference in response rates was 76.3% regarding the proposition "collaborated with other non-profits in the community." 83.3% of emerging leaders discussed this proposition while only 7.1% of seasoned leaders did. The smallest difference in response rates was 21.6% regarding the proposition "more issue based programming." 50% of emerging leaders and 28.6% of seasoned leaders discussed this proposition.

Summary

Qualitative analysis of the interview data produced rich results for the researcher to apply to the research question. Chapter V synthesizes both the survey and interview data into a discussion about the major trends the leaders in the profession foresee impacting nature centers over the next 25 years.

CHAPTER V

CONCLUSIONS & RECOMMENDATIONS

Introduction

The purpose of the ANCA Blue Ribbon study was to learn what leaders in the nature center profession view as the societal and economic future of nature centers over the next 25 years. This section of the ANCA Blue Ribbon report presents the conclusions of the research. The conclusions are organized into the five themes which emerged from the qualitative data. It then provides recommendations for ANCA based on the conclusions regarding how the organization can further support the growth of the nature center profession over the next 25 years. Chapter V then discusses differences between how the emerging leaders and the seasoned leaders perceive the future. It also compares the conclusions of this report to those of the 1989 NSYF study, explores observations about the research process, and proposes topics for further research.

Conclusions

Theme 1: Nature centers will need to establish relevancy in an increasingly nature disconnected society.

Relevancy is the overarching concept driving how the leaders in the profession perceive the future of nature centers over the next 25 years. Nature centers are public institutions for their communities. Since the inception of the modern nature center with Bear Mountain Park in 1926, nature centers have been places for the community to learn about and connect with the natural world. Executive directors continue to see this as the primary role of nature centers. They perceive changes in economics, programming, partnerships, staff, leadership, governance, and property. But everything the leaders in the profession strive to accomplish with their centers over the next 25 years will be built upon relevancy with their communities and with the natural world.

Executive directors are aware of extraordinary changes emerging in the environment. They are sensitive to environmental shifts affecting local, regional, national, and global communities. The leaders in the profession are positioning their centers to act. Much like other organisms, nature centers are adapting. Many will be emphasizing conservation and restoration ethics in the future. Leaders see nature centers focusing on conservation and restoration through their education programming, messaging, land management, and partnerships. Some foresee nature centers truly becoming leaders for conservation and restoration guiding their communities towards holistic relationships with the land.

The leaders in the profession foresee climate change as an increasing concern for nature centers over the next 25 years. They perceive the effects of climate change intensifying and beginning to impact the land and the lives of the people in their communities. These leaders predict nature centers will serve in their traditional role as places for education. They see centers becoming community resources for information and understanding of the impacts of climate change. But executive directors are unsure of how to accomplish this at their centers. They are contemplating how to best provide education to support resiliency in their communities. Leaders in the profession are also questioning nature centers' traditional aversion to advocacy. They are considering whether, in this time of crisis, nature centers should advocate for action to respond to climate change.

This question of whether nature centers should go beyond education to become advocates strikes at the heart of how nature centers perceive themselves. Most centers stand firm that they educate; they do not advocate. Yet leaders in the profession are questioning this paradigm. It is not easy for nature centers to consider this change. However, executive directors have indicated that it is a conversation the field must have in order to remain relevant to the extraordinary change in the environment.

The leaders in the profession are also clear that nature centers must continue to grow their relevancy in their communities over the next 25 years. Directors foresee nature centers working towards this by being more creative with messaging to promote their value to the public. They will also be focusing on how to better serve their constituencies. They emphasize building reciprocity: reacting to the community's wants and needs. An aspect of reciprocity is becoming more welcoming and accommodating to diverse audiences. The leaders in the profession will be seeking the input of multi-cultural audiences to help shape their centers in the future.

The leaders in the profession expect technology to become an increasingly important aspect of the nature center business. While the nature center field has historically been conflicted over embracing technology, the leaders in the profession have started to embrace social media and mobile technology. They are contemplating how to leverage this technology to enhance their programming, public relations, and marketing. They see the nature centers of the future appealing to the new generations of digital natives who have grown up integrating mobile devices into their everyday lives.

Theme 2: Nature centers will adapt funding for day to day operations and long-term sustainability.

Fundraising and generating income has always been a challenge for nature centers. The leaders in the profession perceive the economic landscape of the future to be equally dynamic. The directors expressed a variety of ways in which nature centers must adapt their business and fundraising models to continue to thrive into the next 25 years. However, the leaders are overwhelming saying that nature centers cannot get comfortable. They must be nimble and quick to react to changes in the local, regional, and national economic landscapes.

It is clear that the profession perceives the 2008 economic recession continuing to affect nature centers into the future. The survey discovered that the majority of nature center professionals see the recession impacting the strategic direction and fundraising of their centers over the next 7 years. The leaders in the profession confirmed this trend in the interviews. They discussed how the recession has and will continue to put pressure on funding sources. They described a tightening of resources from private philanthropy, government sources, and foundations as well as earned income.

However, not all nature centers were adversely affected by the recession. Some leaders indicated that stability in their local and regional economies sheltered their centers from the storm. Whether or not the recession is impacting centers, the leaders in the profession foresee increasing income and fundraising as challenges in the future. Leaders see nature centers adapting in one of two ways: streamlining or diversifying. Some leaders foresee nature centers retracting to their core principles and their most effective programs. These leaders have found success streamlining their centers to become as lean and as efficient as possible. But the majority

of the leaders in the profession are emphasizing diversification of program offerings and income sources. They are hedging their bets against a perceived persistent decline in school programs by increasing programs for adults, families, and the community. They also foresee an increase in facility rentals, private events, and professional development programs for teachers.

The survey discovered that nature centers will be increasing their investment in fundraising. The leaders in the profession anticipate that this investment of energy and resources will pay off with increased individual donations. They are especially focusing on providing their constituents opportunities to leave an environmental legacy through planned giving. However, they highlighted that nature centers must be better at promoting their value in order to truly reap the benefits of investing in fundraising. The leaders in the profession are calling for more research evaluating nature center programs and identifying their true outcomes. But they expressed that few if any executive directors have the time conduct this research on their own.

Another future trend in fundraising is collaboration. The leaders in the profession emphasized that nature centers must work together with other organizations to increase the scale of their impact. They explained that collaboration will be key to winning larger grants from foundations who are increasingly looking to fund programs with more ambitious outcomes for the community. Some leaders took this concept further and discussed the possibility of nature center consortiums or coalitions. They envision nature centers banding together to not only collaboratively raise funds, but also work together to affect legislation and public policy. The leaders largely see this as a concept that will take time to develop. However, they are passionate about the potential of authentic partnerships to expand the influence and impact of nature centers.

Theme 3: Nature center programming will evolve.

The leaders in the profession foresee nature center programming evolving over the next 25 years. The changes they perceive to programming are interconnected with relevancy as well as economic changes. A major way the leaders already see programming developing is with a commitment to lifelong learning. The leaders in the profession are enhancing their programming to reach all ages in their community. They are working to create suites of programs to reach students at all stages of their lives from preschool through college and into adulthood. These leaders are motivated by a desire for nature centers to have multiple contacts with students throughout their lives rather than being a field trip that students only experience once. The leaders identified that some levels of programming, specifically high school and college, require a lot of work to develop into polished products. But they only see this trend growing over the next 25 years.

The leaders in the profession perceive nature preschools as the entry way to lifelong learning at their centers. Some leaders already operate fully functioning preschools. They see nature preschools as a wave that will catch more and more nature centers in the near future.

The leaders in the profession also expect the nature center programs of the future to be more authentic. Both donors and executive directors are concentrated on providing authentic programs that truly teach students skills to address environmental issues. The leaders in the field see field research and citizen science playing a role in developing authentic programs in the future. Many of the leaders desire to develop programming that engages students in issues analysis. They seek to elevate programming to the higher level goals of environmental education and create real champions for the environment.

Connected to this emphasis on authenticity is the desire of leaders in the profession to expand beyond school programming. Leaders expressed that school programs, the traditional backbone of nature centers, have become stagnant. They see little change in their structure since their creation. For many leaders, economic pressure has urged them to look at school programs with a more critical eye. They are examining the impact school programs have on students. The leaders in the profession are not planning to dissolve their current school programs. But for many, school programs are not a priority for the future either.

The leaders in the profession do not currently have answers for what lies beyond the school programs model. They do not yet know what the next authentic, impactful, and economically viable model will be. But they are looking to the horizon for innovation.

Theme 4: Nature center professionals will develop modern skill sets.

The leaders in the profession foresee the nature center staff and board positions of the future becoming increasingly sharpened and skilled. They predict that nature center staffs will continue to take on new responsibilities as centers diversify their programming to become more adaptable and nimble. The leaders are anticipating that increased staff training and professional development will be needed to equip staff members with the skills and knowledge necessary to make nature centers thrive. The leaders in the field also foresee a generational shift occurring within nature centers. As long-time staff begin to retire, nature centers will have to integrate a new generation of educators and professionals into their organizations.

The governing boards of nature centers are varied in structure and function. As one respondent stated, "If you've seen one board, you've seen one board. They're all unique." The directors who participated in interviews work with boards that are at various stages of

development. However, the leaders in the profession agreed that the nature center boards of the future will become more financially skilled and reflective of their communities. The leaders are striving to add board members who can martial resources. If nature centers are to grow in the future, boards must have greater fundraising skills and connections to donor. The leaders in the profession also emphasized that nature center boards must become more representative of their communities. In order to better serve communities, boards must have members who understand their communities. The leaders will be working to recruit culturally and socioeconomically diverse board members who can represent the community.

Similarly, the leaders in the profession perceive that the executive directors of the future will need to have stronger business abilities. The leaders foresee executive directors having an even greater role in maintaining financial stability for centers. With an ever-changing economic landscape, the leaders emphasized that future directors must also possess entrepreneurial skills to quickly adapt. They predict the next generation of directors may be hired from outside the profession. However, the leaders maintained that executive directors will always need to have passion about the environmental missions of the nature centers they lead. In fact, the leaders in the profession assert that executive directors to be more outspoken about environmental issues and involved in community planning. The leaders in the profession believe that the growth of nature centers depends upon the passionate voice of executive directors.

Theme 5: Nature centers will strengthen their properties.

Similar to boards, nature center properties are in different situations depending on their community. Therefore, the perceptions from the leaders in the profession about how they will

change were also diverse. In general, the leaders foresee nature centers strengthening their facilities and land.

Only a third of the leaders plan to construct new buildings over the next 25 years. These leaders have their sights set on new visitor centers and educational facilities in the next couple decades. Some are planning simpler, more resilient structures that are lighter on the land.

The leaders in the profession were split on whether their centers will be acquiring more land over the next 25 years. The survey showed that a third of nature center professionals thought their centers will. The leaders who are looking to acquire land, plan to do so opportunistically as it becomes available. They are motivated to prevent further urban development of land in their communities.

Several leaders foresee the increasing advancement of urban and suburban sprawl changing the role of nature centers in their communities. In some places, centers are becoming islands of nature within sprawl rather than the gateways to the natural world outside cities that they once were. This is the changing the way that some communities perceive their nature centers. The leaders forecast that this shift may even present opportunities for the creation of new nature centers as the spaces between sprawl shrink.

Differences in Emerging and Seasoned Leader Perceptions of the Future

The ANCA Blue Ribbon project sought to understand the perceptions about the future from the seasoned leaders who have been the backbone of the profession for decades as well as the emerging leaders who will be carrying the mantle of nature centers into the next 25 years. This project discovered that there are significant differences in how emerging leaders are contemplating and planning for the future (see Table 12). The emerging leaders more often emphasized trends that marked a departure from traditional nature center paradigms. They more frequently discussed the need for nature centers to address climate change and to consider the role of advocacy. They were much more vocal about innovative changes to programming including expanding to reach all ages, incorporating issues analysis, and integrating authentic field research. Nearly all emerging leaders discussed the desire to expand beyond school programming while less than a quarter of the seasoned leaders responded with this ethic. The emerging leaders in the profession clearly have a different vision for certain aspects of nature centers. They seem to be more oriented towards innovation of traditional nature center paradigms. This research does not suggest that the seasoned leaders in the profession are inflexible or obstinate to such changes. However, they did not discuss fundamental changes in these areas as often as the emerging leaders.

Comparisons with the 1989 NSYF Study

The ANCA Blue Ribbon project echoed several of the same sentiments that the NSYF study identified in 1989. Fundraising is still a major point of emphasis. The NSYF study highlighted fundraising as the most pressing concern for the survival and growth of nature centers. The leaders in the profession are still acutely focused on fundraising today. It is not surprising that nature centers have not yet found the silver bullet for fundraising. As environmental education non-profits, nature centers will likely always grapple with fundraising. Nature centers are still working to strengthen their connections to their local communities. The NYSF study showed that nature centers were concerned about garnering the support of their constituents and promoting their value to the community. Nature centers are clearly still contemplating and working on these areas. Nature centers are also still focused on increasing the business skills of their staffs and boards 25 years after the NSYF study identified the same trend. Several of the larger trends and concerns from the NSYF study persist today. But the ANCA Blue Ribbon study identified many modern trends and concepts that mark the significant advancement of the field since 1989.

ANCA Recommendations

The ANCA Blue Ribbon project identified many trends in how nature centers will grow and change over the next 25 years. Some of these trends express clear ways nature centers will evolve and tackle challenges in the future. However, many of these trends articulated concepts which the leaders in the profession are contemplating how to address in the future. Some identify specific needs of nature centers. This section presents recommendations for how ANCA can lead the exploration of these unresolved trends and address specific needs. Recommendations are listed numerically with brief explanations.

1. Support the development of nature centers into conservation and restoration leaders.

Champion nature centers which have successfully integrated conservation and/or restoration ethics into their organizations. Develop best practices for nature centers supporting conservation and restoration in their communities.

 Lead the conversation about education and advocacy concerning climate change. Investigate how nature centers in currently impacted regions are beginning to address climate change. Provide spaces for directors to discuss how centers can and should react.

3. Develop best practices for integrating technology into programming and business models.

Champion nature centers which have integrated technology in significant ways. Due to the fast pace of innovation, focus on ways to leverage social media and mobile technology rather than specific devices such as iPads.

4. Develop best practices for resiliency to future economic downturns.

Identify lessons learned from nature centers that were affected by the recession.

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5. Support the promotion of the value of nature centers.

Conduct evaluation and outcome research on nature centers. Develop best practices for promoting the value of nature centers in the community.

6. Be a catalyst for collaboration.

Champion nature centers which have successfully collaborated with other organizations to increase the scale of their impact. Develop best practices for collaborating to win larger foundation grants. Facilitate discussions on the potential for nature center consortiums and coalitions.

7. Promote innovative programming.

Champion nature centers which have created successful programs for high schoolers, college students, and adults. Champion programs which have successfully integrated issues analysis, field research, and citizen science.

8. Explore the horizon beyond school programming.

Facilitate discussions of the value of traditional school programs. Provide spaces for directors to discuss new models of programming.

9. Promote boards reflective of their communities.

Champion nature centers which have benefited from diverse, reflective boards.

Observations about the Research Process

Participants in the ANCA Blue Ribbon project found the time frame of 25 years difficult for predicting how centers will change. Nature center professionals who pilot-tested the survey recommended to change the time frame of many of the questions to 7 years, the typical lifespan of a strategic plan. Interview respondents also struggled to make forecasts over the time span of the next quarter-century. They explained that economic, social, and technological changes can occur so quickly and dramatically that it is difficult to perceive what the landscape will be like 25 years from now. Like the survey respondents, many were concentrated on shorter-term changes in regards to their strategic plans. However, the focus on 25 years did elicit some important long-term changes to the field and produce big questions about the future roles of nature centers.

Nature centers are very diverse in form and function. This research included private nature centers, public nature centers, and everything in between. It interviewed the directors of nature centers at different stages of development with different educational focuses, economic situations, constituents, and governing bodies. The project displayed the great diversity of nature centers that exists in the field. While this research identified major ways the nature center field will change, these trends may not be applicable to some centers. How nature centers change will always be driven first by the specific advantages and challenges of their individual circumstances.

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Topics for Further Research

The ANCA Blue Ribbon project discovered specific trends in how nature centers will change. But it also uncovered more questions for further research to address. The nature center field needs research into the impacts of their programming on school students and the public. Most nature centers do not have the time or the resources to conduct such outcome research on their own. Comprehensive evaluation research of programming would help nature centers both improve their programs and better promote their value to the community. Similarly, research into the effectiveness of integrating mobile technology is needed to keep nature centers on the cutting edge. The field needs to learn how to best imbue this technology into their centers in ways that help meet their missions and draw the community inward.

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APPENDIX A

Institutional Review Board Approval

The ANCA Blue Ribbon project was approved by the University of Wisconsin- Stevens Point Institutional Review Board for the Protection of Human Subjects. The Institutional Review Board approved that the survey and interview methods met the ethical standards for the discipline. The following a copy of the signed approval form.

University of Wisconsin-Stevens Point Institutional Review Board for the Protection of Human Subjects **Protocol for Original Submissions**

13-14,078

A complete protocol must be submitted to the IRB for approval prior to the initiation of any investigations involving human subjects or human materials, including studies in the behavioral and social sciences.

For all research protocols, please submit the following:

- 1 printed copy with Faculty Mentor and Department Chair signatures of (1) the completed protocol; (2) project abstract; and (3) samples of informed consent forms. PROTOCOLS LACKING ANY ONE OF THESE THREE ELEMENTS WILL NOT BE APPROVED.
- A second copy of this page, with signatures. IRB/ORSP, 208 Old Main. Printed materials should be submitted to:
- Electronic copies of all submission materials (multiple files are acceptable) emailed as attachments to Jason R. Davis, IRB chair: <u>idavis@uwsp.edu</u> AND Sharon Courtney, Grants Office: scourtne@uwsp.edu

PI FASE TYPE

| Project Title: The Future of Nature Centers: A View | from the Profession | |
|---|---|---|
| Principal Investigator: Andrew Revelle | | |
| Department: Natural Resources | Rank: Gradua | ate Student |
| Campus Mailing Address: Conserve School: 5400 N | lorth Black Oak Lake Road, | Land O'Lakes, WI 54540 |
| Telephone: (410) 948-4838 | E-mail address: Andrew.P. | Revelle@uwsp.edu |
| Faculty Sponsor (if required): Beenda Lag (Faculty sponsor required if investigator is below rar | hey nk of instructor.) | |
| Expected Starting Date: 3/5/2014 | Expected Completion I | Date: <u>3/1/2015</u> |
| Are you applying for funding of this research? Yes | No X | |
| If yes, what agency? | | |
| Incarcerated individuals Men Othe | itally Disabled | (specify) |
| (Faculty Member) I have completed the "Human S <u>http://www.uwsp.edu/special/irb/start.htm</u>) and research in accordance with the guidelines. | ubjects Protection Training" agree to accept responsibilit | (available at ty for conducting or directing this |
| (Signature of Faculty Member responsible for rese | arch) | |
| (Department Chair or equivalent) I have reviewed believe that it meets the ethical standards of the dis | d this research proposal and, scipline. | , to the best of my knowledge, |
| (Signature of Department Chair or equivalent) | | |
| IRB approval | his line – for IRB use only f | |
| (Signature of IRB Chair) Approval for this research expires one year | r from the above date. | |
| If research is not completed by this date, a | request for continuation | n must be filed and |
| approved before continuing. | | Revised form: August 2011 RECEIVED |
| | | |
| | | MAR 1 4 2014 |
| | | Office of Researce & Sponsored Progr |

APPENDIX B

Survey Questions

Appendix B includes the survey sent out to the ANCA membership. The survey appears here in a webpage format, the same way the respondents interacted with it.

ANCA Survey: The Future of Nature Centers

* 1. Describe in which areas you see your organization undergoing the most significant change over the next 25 years by ranking the following areas from 1 to 6. Mark "1" for the area in which you expect to see the most change for your organization and "6" for the area in which you expect to see the least change.

| Staffing |
|--|
| Fundraising |
| Role in the local community |
| Physical property including land and buildings |
| Educational programs and services |
| Organizational governance |

*2. Respond to the following statements regarding change in your organization's staffing over the next 7 years. Mark one of four responses from "strongly agree" to "strongly disagree."

| | strongly agree | agree | disagree | strongly disagree |
|--|----------------|-------|----------|-------------------|
| Your organization's education staff positions will increase. | 0 | 0 | 0 | 0 |
| Your organization's public relations staff positions will increase. | 0 | 0 | 0 | 0 |
| Your organization's fundraising staff positions will increase. | 0 | 0 | 0 | 0 |
| The role of the director in your organization will be different. | 0 | 0 | Ο | 0 |

https://www.surveymonkey.com/s.aspx?PREVIEW_MODE=DO_NOT_USE_THIS_LIN... 3/11/2014

★3. Respond to the following statements regarding change in your organization's fundraising over the next 7 years. Mark one of four responses from "strongly agree" to "strongly disagree."

| | strongly agree | agree | disagree | strongly disagree |
|---|----------------|-------|----------|-------------------|
| Your organization will increase the energy and resources it invests in raising funds. | 0 | 0 | 0 | 0 |
| Your organization will raise funds from new sources. | 0 | 0 | 0 | 0 |

*4. Respond to the following statements regarding your organization's role in the local community over the next 7 years. Mark one of four responses from "strongly agree" to "strongly disagree."

| | strongly agree | agree | disagree | strongly disagree |
|---|----------------|-------|----------|-------------------|
| Your organization's role in the local community will change. | 0 | 0 | 0 | 0 |
| Your organization will change the target audiences for its programs. | 0 | 0 | 0 | 0 |
| Your organization's relationship with school districts will change. | Ο | 0 | 0 | 0 |

*5. Respond to the following statements regarding your organization's physical property over the next 7 years. Mark one of four responses from "strongly agree" to "strongly disagree."

| | strongly agree | agree | disagree | strongly disagree |
|--|----------------|-------|----------|-------------------|
| Your organization is planning to acquire new land. | Ο | 0 | 0 | 0 |
| Your organization is planning to | 0 | 0 | 0 | 0 |

https://www.surveymonkey.com/s.aspx?PREVIEW_MODE=DO_NOT_USE_THIS_LIN... 3/11/2014

| construct new buildings. | strongly agree | agree | disagree | strongly disagree |
|--|----------------|-------|----------|-------------------|
| Your organization will focus on retrofitting its buildings to become more sustainable. | Ο | 0 | 0 | 0 |

★6. Describe the future quantity of your organization's school programs over the next 7 years by completing the following statements.

| | increase | remain constant | decrease |
|---|----------|-----------------|----------|
| Your number of onsite school programs will | Ο | Ο | Ο |
| Your number of offsite outreach programs will | 0 | 0 | 0 |

* 7. Check all boxes that apply to your organization's relationship with a friends group over the next 7 years.

| A relationship with a friends group currently | Your friends group will become a larger source |
|---|--|
| exists | of income for your organization |

No relationship with a friends group currently exists

Your friends group will become a smaller source of income for your organization

You plan to create a relationship with a friends group

Next

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APPENDIX C

Request for Interview Email

Hello [NAME],

My name is Andrew Revelle. I am a graduate fellow at the University of Wisconsin- Stevens Point working with Dr. Corky McReynolds and ANCA on the 25th Anniversary Blue Ribbon Project. This research project is designed to investigate the future of nature centers. Moreover, it will depend on leaders in the nature center profession sharing their views on the societal and economic future of nature centers in the U.S. over the next twenty-five years. You may have seen ANCA Director Jen Levy's emails about the project or participated in the survey portion of the project. I have attached an abstract of the research to this email.

I am writing to ask if you would be willing to participate in the interview portion of this project. Based on the initial survey of the ANCA membership, you have been nominated by your peers as one of seven emerging leaders in the nature center profession. I am very interested in learning about your views on how your organization's strategic direction could change in the future.

If you are willing to participate in this project, the interview would be conducted over the phone and last 30 minutes to an hour. The interview would be recorded and its content would be used in the Blue Ribbon Report to be published by ANCA.

Participation from leaders like you is critical for this project, so I would really appreciate your help. The information you provide in this interview would benefit nature centers around the country with their strategic planning to meet the challenges of the future.

If you are interested in participating in an interview, please let me know. I plan to conduct interviews this spring and summer. Also, please let me know if you have any questions or concerns about the interview process. I look forward to hearing from you soon.

Sincerely,

Andrew Revelle

APPENDIX D

Informed Consent Form to Participate in Human Subject Research

Dr. Corky McReynolds, Director and Professor at Treehaven, and his advisee Andrew Revelle, a graduate fellow in Natural Resources and Residential Environmental Education at the University of Wisconsin-Stevens Point are conducting a study to examine what leaders in the nature center profession view as the societal and economic future of nature centers over the next 25 years. The study includes a survey of the ANCA membership as well as in-depth interviews with nature center directors. The study will culminate in a Blue Ribbon ANCA report. You are being asked to participate in an interview that should take no more than an hour of your time.

We anticipate no risk to you as a result of your participation in this study other than the inconvenience of the time to complete the survey.

The benefit to participation in the study is the opportunity to contribute your perceptions about the future of nature centers to an ANCA report. The report will be a useful resource for nature center administrators and board members in the strategic planning processes for their organizations.

The information that you give us in the interview will be recorded and transcribed into a Microsoft word file. Your name and organization will only be attached to interview data and included in the ANCA Blue Ribbon Report if you consent below. If you choose not to consent, a pseudonym will be used in place of your name and your organization's name.

If you want to withdraw from the study at any time you may do so without penalty. The information you provided up to that point would be destroyed.

Once the study is completed, the results will be published in an ANCA Blue Ribbon Report. In the meantime, if you have any questions, please ask us or contact:

Andrew Revelle Graduate Fellow in Natural Resources and Residential Environment Ed. University of Wisconsin-Stevens Point Stevens Point, WI 54481 (410) 948-4838

If you have any complaints about your treatment as participant in this study, please call or write: Dr. Jason R. Davis, Chair Institutional Review Board for the Protection of Human Subjects School of Business and Economics University of Wisconsin-Stevens Point Stevens Point, WI 54481 (715) 346-4598 Although Dr. Davis will ask your name, all complaints are kept in confidence.

I have received a complete explanation of the study and agree to participate.

| Name | Date |
|------------------------|------|
| (Signature of subject) | |

I consent to my name and organization being attached to interview data and being included in the ANCA Blue Ribbon Report.

Name

(Signature of subject)

This research project has been approved by the UWSP Institutional Review Board for the Protection of Human Subjects.

APPENDIX E

Interview Questions

- 1. How will the nature center profession change over the next 25 years?
- 2. How will recent economic and societal events impact the strategic direction of your center over the next 25 years?
- 3. How will sources of operating revenue change over the next 25 years?
- 4. Will the past trend of creating and increasing endowments be a trend in the next 25 years?
- 5. What will be the changes in educational programs and services over the next 25 years?
- 6. How will staffing change over the next 25 years?
- 7. What will be the role of your organization in the local community over the next 25 years?
- 8. How will your land base and physical facilities change over the next 25 years?
- 9. How will the role of your organization's governance change over the next 25 years?
- 10. How will the role of the executive director be different over the next 25 years?

APPENDIX F

Interview Data: Propositions

Appendix H presents the full list of propositions from the interviews. The propositions are listed under their corresponding interview questions. The propositions are tagged with letters representing the respondents who discussed those ideas. Multiple letters indicate that the proposition was discussed by multiple respondents.

1. How will the nature center profession change? 1. Broaden our scope beyond natural history А 2. Innovate and true partnerships A, F, G 3. Evolved to be a part of a community, sense of ownership B, G, P, I 4. Staying relevant, in an increasingly nature disconnected society B, F, H, I 5. Serving the adult and aging populations E, G 6. Increased privatization С C, F 7. Take on more advocacy 8. Embrace personal restorative experiences С 9. Nimbleness D 10. Leader in invasive species education and action Е 11. Focus on restoration efforts L, M, N 12. Promote conservation L, M, N P F 13. Community health 14. Increased professionalism-pre and in-service training F 15. Increased capability to raise funds G 16. More accessible to all Η 17. Staying on the cusp of technology J, L, M, P, Q, R 18. Reciprocal relationships with diverse, multicultural audiences K, M 19. Incorporate this huge environmental issue (climate change) into our programs K. N. P 20. Be relevant to the extraordinary amount of change to the environment L, M, N, P M, O 21. Discussing our centers not as a gateway but as an urban and suburban oasis M, P 22. Take ourselves more seriously as a social force 23. Groundswell of new directors Ι

2. How will recent economic and societal events impact the strategic direction of your center?

| your center: | |
|---|------------------|
| 24. Continued pressure on funding when compared to core mission | G, M |
| 25. Attendance went up, people stayed closer to home | G |
| 26. Collaborate with other non-profits in the local community | H, I, J, K, L, N |
| 27. More emphasis on short term pay-offs | С |
| 28. Changing markets from schools but to what? | D |
| 29. Wasn't affected because our state was already in downturn | F |
| 30. Traditional major donors and foundations diverted toward urgent needs | E |
| 31. Retracted to core principles and values, became sharper focused | В |
| 32. There were some mergers | В |
| 33. Do more, offer more | A, I, J, N, O |
| 34. Decline in school groups | I, N |
| 35. Thinking outside the box with funders and partners | Ι |
| 36. Create a coalition of nature centers | I, K, L, N |
| 37. Teacher development programs | I, K |
| 38. Be creative about the message | J |
| 39. Do better at helping others see the value of what it is that happens at these centers | J, K, M, O, Q, R |
| 40. Speaking to one specific topic | Κ |
| 41. Need for ongoing evaluation and outcome research | К, М |
| 42. Diverse revenue streams | 0 |
| 43. Be as nimble and resilient as we can | Ν |
| 44. Diversify our audiences | N, O |
| 45. Can't get comfortable | Ν |
| | |

| 3. How will sources of operating revenues change? | |
|--|------------|
| 46. Diversified income base | H, N |
| 47. Increased grant funding as our relevancy increases | Н |
| 48. Increased facility rentals and corporate events | A, L, M, O |
| 49. Membership growth | G |
| 50. Increased annual giving | G, M |
| 51. Directed fund raising for specific programs/projects | G |
| 52. Less government funding | B, C |
| 53. Charitable giving will equal deliverable | C, A |
| 54. Increased earned income | C, H |
| 55. Friends group could be assessed fees by the county | D |
| 56. Premium fees at premium times | D |
| 57. More fund raising by Friends for operating expenses | D |
| 58. More individual gifts | F, M |
| 59. Don't see big changes | F |
| 60. Strategic partnerships with businesses and school systems | F |
| 61. Cost-cutting, getting lean as possible | Е |
| 62. Cost sharing of HR with other non-profits | Е |
| 63. Development and donations are still our growth areas | А |
| 64. Focusing on estate plans and planned giving | I, M, O |
| 65. Collectively work to scale up what we're doing in the eyes of donors | K, L, M |
| 66. Donor community likes to see community-wide, more organized efforts | M,N |
| 67. Collaborations that grow the market, grow the pie | М |
| 68. Be creative with how we market ourselves to those larger funding sources | L |
| 69. Develop private philanthropy around conservation and restoration | М |
| 70. Plan for the fact that we are going to see less school field trips | Ν |
| 71. Focus on alumni and their connections to other organizations | N, O |
| 72. Create stake holders through nature preschool | 0 |
| 73. Foundations are much more targeted | Р |

| 4. Will the past trend of creating and increasing endowments be a trend? | |
|---|------------------------|
| 74. Yes, planned giving will increase, especially from baby boomers | A, B, C, G, H, M, P, R |
| 75. Not sure donors will be as supportive toward long term investing | С |
| 76. More accountability toward use of funds | C, E |
| 77. Yes, but not as easy to raise, will need to be more creative | F |
| 78. Yes, current policy is 20% of capital drive is for endowment | Н |
| 79. Yes, will raise funds from the people we serve | D |
| 80. Not sure, but needed | E |
| 81. Need to convince the foundations | E |
| 82. Strong case for catching these legacies, especially when we're talking about conservation | Р |

| 5. Wh | at will be the changes in educational programs and services? | |
|---------|---|------------------------|
| | duction in travel programs | G |
| 84. Inc | rease in conservation education | G |
| 85. Inc | rease young, pre-school children | G, F |
| 86. Inc | rease education about invasive species | G |
| 87. Ma | ake it real and accessible, actual reality, authentic | H, F |
| 88. Sc | ience! | Н |
| 89. Mo | ore accountability with measurable objectives | С |
| 90. Su | stainable living | D |
| 91. Va | ried audiences beyond schools | D, F |
| 92. He | althy living and lifestyle, food and farms | F |
| 93. Fit | s into curriculum | E, B |
| 94. Ne | w and creative delivery methods | В |
| 95. Ex | panding beyond school programming | I, K, L, M, N, O, P, R |
| 96. Na | rrowing of program offerings | Ι |
| 97. Mo | ore emphasis on family oriented programs | I, K, N, Q |
| 98. Inc | rease middle school and high school programs | J, K, O |
| 99. Al | low a platform for exploration of environmental careers | J |
| 100. | Connecting authentic field research with the education program | J, N, P, R |
| 101. | Citizen science | J, L, P, R |
| 102. | All ages | J, K, L, M, N, O, P, Q |
| 103. | Multiple contacts with an individual starting at younger ages | K, L, M, O, P, Q |
| 104. | Partnership with local college | J, K, N, R |
| 105. | Art and the environment | J |
| 106. | Wildlife conservation | J |
| 107. | Uninhabited play | J, L |
| 108. | Adult programming | J, K, L, M, N, O, P, R |
| 109. | Reciprocal multi-cultural types of programs | К, М |
| 110. | More issue-based programs | K, L, M, N |
| 111. | Need to talk about restoration | L, M, N |
| 112. | Getting outside | M, P |
| 113. | Abandon things that are generic | M, P |
| 114. | Making a trade of intense and long programs versus one of field trips | M, O, P, R |
| 115. | Create real champions | M, P |
| 116. | Land trusts | M, Q |
| 117. | Diversify and expand program offerings | I, J, N, O, P |
| 118. | Multidisciplinary programs | N |
| 119. | Spontaneity and ability to respond to community's wish | Р |
| 120. | Nature preschool | I, M, O, P, Q |
| | | |

6. How will staffing change?

| 121. | Growth in number of staff members will slow down | Н |
|------|---|------------------|
| 122. | There will be an increase in numbers of staff | G, L, N, O, P, R |
| 123. | Increased orientation of educational staff | G, N |
| 124. | Staff will continue to have more hats than they used to | Ν |
| 125. | Re-energize farm property | G |
| 126. | There will be fewer field biologists available | С |
| 127. | Retirements | B, D |
| 128. | Growth in professionalism | F, P |
| 129. | Degreed programs for the business aspects of our profession | F |
| 130. | Integration of older with younger staff | E |
| 131. | More training and specialized staff | E |
| 132. | Understanding of generational workforce differences | Е |
| 133. | Newer staff want more of a life | E |
| 134. | Recent graduates have different set of skills | Κ |
| 135. | Attract seasonal staff to come back year after year | Ν |
| 136. | More attractive benefits package | Е |
| 137. | More ethnic diversity | А |
| 138. | Bilingual | А |
| 139. | Staff nurtured into administrative roles | А |
| 140. | Staff involved in national organizations | А |
| 141. | Hire development director | O, R |
| | | |

| 7. Wł | nat will the role of your organization in the local community be? | |
|-------|---|---------------|
| 142. | Champion frequent experiences with nature | А |
| 143. | Stronger community role | L, M, N, O, P |
| 144. | Have as much major awareness as a museum or zoo | В |
| 145. | Promoting the nature center as the destination point | J, O, P |
| 146. | Engage the local community as seeing this place as a resource | K, O, P |
| 147. | More active partnerships in the community | M, N, O |
| 148. | More staff involved in other boards and organizations | E |
| 149. | Build relationships with local school districts | Ν |
| 150. | Be an anchor institution, like a church, a museum | Н |
| 151. | Community gathering place | O, P |
| 152. | Be a part of statewide tourism | Н |
| 153. | Increase our circle of influence | Н |
| 154. | Be an activist voice for conservation | С |
| 155. | Reputation as conservation leaders | I, M |
| 156. | Services to help private land owners with conservation projects | I, L, M, P |
| 157. | Restoration | L, M, N |
| 158. | Example to land owners to manage their property towards having healthy | M, N |
| | osystems that are appropriate for the area | _ |
| 159. | Continue to be a resource for the community | D |
| 160. | A place for being outdoors in a very urban environment | D |
| 161. | Create urban nature parks | F |
| 162. | Active in the community | E, F |
| 163. | Help create "place-making" | E |
| 164. | Be the organization for environmental perspectives | Е |
| 165. | Don't see advocacy | Е |
| 166. | Will be the place for nature education | А |
| 167. | Leaders towards a consortium of nature centers | Ι |
| 168. | Work together with other nature centers to set community wide standards and | Μ |
| - | pals | |
| 169. | hub of real research | J, N |
| 170. | Get community involved as stakeholders for the future of the nature center | Р |

| 8. How will your land base and physical facilities change? | | | |
|--|--|------------------------------|--|
| 171. | We will acquire more land | A, B, C, F, G, H, O, P, Q, R | |
| 172. | Purchasing new land for a farm program | Р | |
| 173. | Satellite properties | Р | |
| 174. | Land mitigation projects | Q | |
| 175. | New visitor center for visitor services and offices | Н | |
| 176. | There is a need to build more facilities or have larger facilities | K, L, N, P, R | |
| 177. | Nature preschool facility | Р | |
| 178. | Movement towards simpler facilities, lighter on the land | K, N | |
| 179. | Build corporate-type retreat area | 0 | |
| 180. | New trailheads and parking | Н | |
| 181. | No new buildings | D | |
| 182. | Not going to be purchasing more land | I, J, K | |
| 183. | Become a center for conservation and stewardship, a land trust | G, B | |
| 184. | Adapt buildings within the existing footprint | Q | |
| 185. | Catch up with deferred maintenance & minor modifications | A, B, C, E, F | |
| 186. | Land locked, unable to add land | D, E | |
| 187. | Concentrate on invasive species | Е | |
| 188. | Volunteer effort into rehabbing the environment | I, J, K | |

| 9. Ho | w will the role of governance change? | |
|-------|--|------------|
| 189. | Increase size of board | Н |
| 190. | New board with means, standards & external focus | Н |
| 191. | Need more businesses & industry leaders | Н |
| 192. | Candidate that would be that big thinker | J |
| 193. | Diverse in professional backgrounds | I, K, L |
| 194. | Diverse in socioeconomic backgrounds | I, K |
| 195. | The board should reflect the community that you serve | J, K, M, Q |
| 196. | Get younger people | Κ |
| 197. | Smaller is better | Κ |
| 198. | An advisory board taking more of a role in fund raising | С |
| 199. | Role of Friends becoming a leading board | D |
| 200. | No change, already a mature governing board | F, G |
| 201. | Will stay open to any new models | F |
| 202. | Strategic plan is becoming more sophisticated | Е |
| 203. | Get the board from hands-on to governance & policy | A, E |
| 204. | Sharply focused boards that help get nature centers to their next level of | М |
| de | velopment | |
| 205. | Growth in board capacity | L |
| 206. | More engaged board | J |
| 207. | Diversify membership | А |
| 208. | More fund raising | А |
| 209. | The board has to be able to martial resources | K, I, M, N |
| 210. | If you've seen one board, you've seen one board. They're all unique | K |
| | | |

| 10. How will the role of the executive director be different over the next 25 years? | | |
|--|--|---------------|
| 211. | More of running a business, not an educator or naturalist | G |
| 212. | More of a role of financial stability | K, M, N, P, Q |
| 213. | Less of an emphasis on natural resource background | Ν |
| 214. | Breadth of knowledge and passion in both the business and natural worlds | J, M, P |
| 215. | A voice for environmental issues | J, O, P |
| 216. | Cultivates a strong leadership team | Н |
| 217. | More capability & involvement in local and national policy issues | C, F, P |
| 218. | More capability in entrepreneurship | С, К |
| 219. | Balance collaboration with the daily operation and strategic needs | Κ |
| 220. | Develop true relationships with funders | L |
| 221. | Less of a naturalist, more of a community organizer | С |
| 222. | Chief relationship officer | Μ |
| 223. | That one person with passion | 0 |
| 224. | Becoming more of a face in the community | I, M |
| 225. | Demonstrates leadership beyond the nature center | F |
| 226. | Better pre-service trained to be an administrator | E |
| 227. | More fund raising | B, G |
| 228. | Will need a COO for daily operations | В |
| 229. | More diversity and bilingualism | А |
| 230. | Talking to higher level donors | I, L, N |
| 231. | Networking and donor cultivation | L, M |

APPENDIX G

Interview Data: Sub-categories

Appendix G presents the interview data at the sub-category level. Propositions were organized into sub-categories. Sub-categories are listed underneath their corresponding interview questions. The propositions within each subcategory are listed to the right.

1. How will nature centers change?

| 1.1 Broaden our scope | 1, 8 |
|-----------------------------------|------------------------------|
| 1.2 Create authentic partnerships | 2 |
| 1.3 Be core to the community | 3, 22 |
| 1.4 Staying relevant | 4, 7, 10, 11, 12, 17, 19, 20 |
| 1.5 Serve our constituents | 5, 14, 16, 18, 21 |
| 1.6 Savvy economic decisions | 6, 9, 15 |
| 1.7 Groundswell of new directors | 23 |

2. How will recent economic and societal events?

| 2.1 Increased pressure on funding | 24, 27, 30, 45 |
|--------------------------------------|--------------------|
| 2.2 Sharper focus on core principles | 31, 40 |
| 2.3 Collaborative funding | 26, 32, 35, 36 |
| 2.4 Move away from school programs? | 28, 34 |
| 2.5 No impact | 29 |
| 2.6 Do more and offer more | 33, 37, 42, 43, 44 |
| 2.7 Better promotion of value | 38, 39, 40 |

3. How will sources of operating revenues change?

| 3.1 Diversify income | 46, 48, 52, 53, 54, 55, 56, 71 |
|----------------------------|------------------------------------|
| 3.2 Grants and fundraising | 47, 50, 51, 58, 63, 64, 68, 69, 73 |
| 3.3 Membership | 49, 72 |
| 3.4 Partnerships | 60, 62, 65, 66, 67 |
| 3.5 Getting lean | 61, 70 |

4. Will the past trend of creating and increasing endowments be a trend?

| 4.1 Planned giving | 74 |
|--|----------------|
| 4.2 Donors may be less willing | 75, 77, 80, 81 |
| 4.3 More accountability for use of funds | 76 |

| 4.4 Through capital campaigns | 78 |
|---|----|
| 4.5 Raise funds from people we serve | 79 |
| 4.6 Catch legacies through conservation | 82 |

5. What will be the changes in educational programs and services?

| 5.1 Expand beyond school programs | 95, 91, 97, 115 |
|--|--|
| 5.2 Narrowing of program offerings | 83, 96, 114 |
| 5.3 Relevant and authentic programs | 84, 86, 87, 90, 92, 93, 99, 101, 102, 107, |
| | 111, 112, 116 |
| 5.4 More accountability | 89 |
| 5.5 Target all ages | 98, 103, 104, 109, 121 |
| 5.6 Partnerships | 105 |
| 5.7 Reciprocal program for the community | 110, 120 |
| 5.8 Land trusts | 117 |
| 5.9 Expand program offerings | 118 |

6. How will staffing change?

| 6.1 Quantity of staff | 122, 141 |
|------------------------------------|-------------------------|
| 6.2 Staff training and development | 123, 124, 128, 131, 139 |
| 6.3 Diversity of backgrounds | 125, 126, 129, 137, 138 |
| 6.4 Turnover | 127, 130, 132, 133, 134 |
| 6.5 More attractive benefits | 135, 136 |

7. What will your organization's role in the local community be?

| 7.1 Champion experience with nature | 142, 160, 161, 163, 164, 166, 170 |
|--|--|
| 7.2 Core to the community | 143, 144, 145, 146, 150, 151, 159, 162 |
| 7.3 More community partnerships | 147, 149 |
| 7.5 Greater influence in the community | 148, 152 |
| 7.5 Voice for conservation | 154, 155, 156 |
| 7.6 Restoration | 157, 158 |
| 7.7 Consortium of nature centers | 167, 168 |
| 7.7 Hub of real research | 169 |

8 How will your land base and physical facilities change?

| 8.1 Increase land base | 171, 172, 173 |
|--|-------------------------|
| 8.2 Site management priorities | 174, 187, 188 |
| 8.3 New buildings and facilities | 175, 176, 177, 179, 180 |
| 8.4. Movement towards simpler facilities | 178 |
| 8.5 No new buildings | 181 |
| 8.6 Not purchasing more land | 182, 186 |
| 8.7 Land trust | 183 |

9 How will the role of governance change?

| 9.1 Increase size of board | 189 |
|---------------------------------------|---|
| 9.2 Quality of the board | 190, 191, 192, 202, 203, 204, 205, 206, 209 |
| 9.3 Diversity of the board | 193, 194, 196, 207 |
| 9.4 Board that reflects the community | 195 |
| 9.5 Role of the board | 198 |
| 9.6 No change, already a mature board | 200 |

10 How will the role of the executive director be different?

| 10.1 Larger focus on business | 202, 203, 204, 205, 209, 217 |
|-------------------------------------|------------------------------|
| 10.2 Voice for environmental issues | 206, 212 |
| 10.3 Develop the team | 207 |
| 10.4 More politically engaged | 208 |
| 10.5 More active in the community | 213, 215, 216 |
| 10.6 More emphasis on fund raising | 211, 218, 221, 22 |
| 10.7 Greater diversity | 220 |

APPENDIX H

Interview Data: Themes and Categories

Appendix H presents the interview at the level of themes and categories. Sub-categories were organized into categories which were subsequently organized into themes. Themes are listed numerically with corresponding categories listed underneath. The sub-categories included in each category are listed to the right.

1. Nature centers will need to establish relevancy in an increasingly nature disconnected society.

| 1.1 Relevancy with emerging environmental issues | 1.1, 1.4, 7.5, 7.6, 7.8, 8.7 |
|--|--|
| 1.2 Relevancy within the community | 1.3, 1.5, 5.7, 5.8, 7.1, 7.2, 7.3, 7.4 |
| 1.3 Relevancy with new technology | 1.4 |

2. Nature centers will adapt funding for day to day operations and long-term sustainability.

| | 2.1 Get leaner | 1.6, 2.1, 2.2, 2.5, 3.5, 4.2, 4.3, 5.2 |
|----|---|--|
| | 2.2 Diversify program offerings | 2.6 |
| | 2.3 Diversify income | 3.1, 3.3 |
| | 2.4 Increases in Fundraising | 3.2, 4.1, 4.4, 4.5, 4.6 |
| | 2.5 Promote the value of nature centers | 2.7 |
| | 2.6 Create authentic partnerships | 1.2, 2.3, 3.4, 5.6, 7.7 |
| | | |
| 3. | Nature center programming will evolve. | |
| | 3.1 Lifelong learning | 5.5 |
| | 3.2 Authentic programming | 5.3 |
| | 3.3 Expansion beyond school programming | 2.4, 5.1, |
| | | |
| | | 1 11 / |

4. Nature center professionals will develop modern skill sets.

| 4.1 Staff Development | 6.1, 6.2, 6.4, 6.5 |
|----------------------------------|--|
| 4.2 Board Development | 6.3, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6 |
| 4.3 Executive Director Skill Set | 1.7, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, |
| | 10.7 |

5. Nature centers will strengthen their properties.

| 5.1 Opportunistic Increases to Land Base | 8.1, 8.6 |
|--|----------------|
| 5.2 Site Management | 8.2 |
| 5.2 Facilities | 8.3, 8.4, 8.5, |
| 5.3 Nature Centers as Urban Oases | 8.1 |