Creating Long-Term Change in International Animal Welfare: An Argument for

Engaging Youth in Participatory Inquiry Using Photography

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Overview

The purpose of this project is to build a rationale for using a participatory, arts-based method known as photovoice to engage local communities in companion animal welfare efforts. The focus is on participatory photography with youth populations and draws upon a previous photography-based project in Accra, Ghana that was completed by the author in 2012. In the paper, a review of community-based participatory research and particularly participatory visual methods, is followed by the author's narrative of her photography-based work in Ghana, a discussion of ethical considerations and evaluation approaches, and recommendations intended to support animal welfare institutions as they consider ways to engage local communities in collaborative inquiry and behavior change intended to improve the lives of animals. For this narrative, the term companion animals will be used to refer to dogs and cats only.

Current State of International Animal Welfare Work

International animal welfare organizations work to end animal suffering and exploitation on a global scale. While funded and founded by westerners, these institutions' projects are often concentrated within the developing world where the welfare of animals is frequently challenged. As one of the largest of these groups, the International Fund for Animal Welfare (IFAW) is currently conducting projects in over forty countries with species ranging from elephants, seals, and whales, to dogs and cats (International Fund for Animal Welfare, 2015). Active on every continent with the exception of Antarctica, Humane Society International's mission is similar to that of IFAW and focuses on improving the welfare of all species of animals around the world

(Human Society International, 2015). Concentrating on wildlife and working equine, the World Wildlife Fund and the Brooke Institute are two additional international organizations working to improve the welfare of animals (World Wildlife Fund, 2015; The Brooke, 2015). Although these organizations work in a wide variety of geographic areas, few have considered the implementation of community-based participatory research. The following section highlights efforts made by IFAW and the Brooke Institute to apply participatory research approaches to international animal welfare work.

The International Fund for Animal Welfare (IFAW) has recently partnered with the United Nations Development Program (UNDP) to design a framework for participatory interventions under the title "Participatory Learning and Action." In Bali, IFAW has striven to involve the community in education surrounding roaming dog welfare through workshops, the creation of a local welfare association, and the initiation of general change in the ways in which local people relate to the roaming dogs (Atema, 2014).

For the past ten years, the Brooke Institute, a UK-based animal welfare organization, has applied participatory research to the welfare of working animals in the developing world. The organization's guidebook, "Sharing the Load," provides in-depth instructions for participatory efforts aimed at improving animal welfare and is intended for use by individuals or organizations that work with people and/or working animals in Africa, Asia, and Latin America (The Brooke, 2015). The Brooke Institute's documentation is the first formal, extensive application of community-based participatory research to international animal welfare (Van Dijk et al., 2011).

While similar to the community-based approach proposed here, these two projects address slightly alternative animal welfare needs. IFAW's work involves participatory education, but does not attempt to identify factors that contribute to companion animal welfare within the local context. The approach described in this paper is a specific technique intended to gather data on local animal welfare attitudes and behaviors through the eyes of community members. It should be completed prior to the design of a project or intervention.

The Brooke Institute provides explicit instructions for how to begin an effort to improve the welfare of working animals, starting with participatory techniques intended to help summarize the current situation and contributing factors for the welfare of working animals. Interestingly, significant differences exist between the human-animal relationships of working animals and those of companion animals. In the case of the working animal, families frequently rely upon these species for their own livelihood. Families may therefore inherently be interested in the welfare and wellbeing of these animals, and may prioritize these species above companion animals.

Human-animal relationships involving companion animals may be less interdependent. Dogs and cats are frequently seen wandering along streets and left to care for themselves, while cultures may alternatively apply high value to the health of working animals' due to human dependence on these species. In the case of companion animals, emotional responses to the animals and factors contributing to the situation must be understood before successful projects can be formulated. Incoming organizations have values, beliefs, and experiences that may inhibit a true understanding of an engagement with local realities and identification of ways to enter a given area effectively.

Photovoice, a community-based participatory research approach that uses photography, can aid in the determination of effective intervention options.

This project provides a theoretical basis for the application of community-based participatory research to the realm of international companion animal welfare and describes a specific youth-focused arts-based technique applied specifically to companion animal welfare. Photovoice can be utilized to understand local animal welfare and related realities, and can become the impetus for a process of advocacy and change. The data and experience can inform further research and applications of CBPR to animal welfare, such as the use of photovoice with youth and other underserved population to explore the conditions of working animals.

Community-Based Participatory Research

Community Based Participatory Research (CBPR) is an approach to inquiry that involves partnership among community members, members of an organization, and/or researchers. Ideally, these parties are equitably involved in contributing substantively to the inquiry effort. The following section will summarize the history of CBPR and its applications. Appendix A then provides a comprehensive summary of the literature on CBPR, photovoice, and youth-engaged participatory research.

CBPR Rationale

Our planet is comprised of a myriad of different cultures, all with varying, sometimes conflicting social values; yet we often find ourselves in contact with one another, perhaps attempting to create social change in a new cultural environment.

Meetings of one or more cultures accompanied by mutual growth, often referred to as acculturation (Ward and Kagitcibasi, 2010), are frequently motivated by a desire to conduct research in order to produce change. Research approaches intended to induce lasting transformation are known as action research (Khanlou and Peter, 2004). Desires to induce lasting transformation have prompted the development of participatory methodologies where the researched communities become involved in the research itself (Brannick and Coghlin, 2007; Burns et al., 2014; Freire, 1972; Huxham and Vangen, 2003; Reason and Bradbury, 2001). The methods have become popular in a variety of fields including critical and social geography (Pain, 2004), development studies (Gaventa, 2005; Dabaieh, 2013), social policy (Bennett and Roberts, 2004), sociology and anthropology (Reitbergen-McCracken and Narayan, 1998; Falzone, 2004), public health (Frahsa et al., 2014), and education (Buck et al., 2014), and research into poverty (Narayan et al., 1999).

These participatory research (PR) techniques are grounded in several overarching principles. First, they are responses to traditional forms of research where the methods are determined and controlled by outside and/or academic researchers. In traditional, non-participatory studies, "long-term success is problematic…because local people are reacting to an outside initiative" (Hackel, 1999). Second, they are an alternative to traditional techniques that allow the researcher's viewpoints to dominate and suppress other opinions, which then diminishes overall knowledge (Aldred, 2009). Third, PR that engages local communities is geared toward identifying actions that will be most readily adopted long-term by those local communities, and will therefore be more sustainable (Beh et al., 2013; Mikesell et al., 2013; Reed, 2008). Projects that result in community

adoption of interventions will be self-sustaining. Fourth and finally, "participatory processes have the capacity to transform adversarial relationships and find new ways for participants to work together": they encourage collaboration in place of antagonism and resistance (Stringer et al., 2006). In general, these four principles explain the relevance and importance of the various forms of participatory research to be discussed below.

Some inconsistencies and debates exist in the literature concerning the relationships between participation, participatory methods, action research, participatory action research (PAR), participatory organizational research (POR), community-based participatory action research (CBPAR), and community-based participatory research (CBPR) (Aldred, 2009; Balcazar et al., 2008; Burns et al., 2014; Khanlou and Peter, 2005; Reed et al., 2013). For some, general participatory methods have been re-named according to their particular applications, such as in community-based conservation (CBC), world café (WC), appreciative inquiry (AI), and the concerns report method (CRM) (Hackel, 1999; Aldred, 2009; Balcazar et al., 2008; Hackel, 1999), and have been conceptually separated from PR and PAR. The current project falls within the designation of community-based participatory research (CPBR), as defined by the W.K. Kellogg Foundation Community Health Scholars Program:

> (CPBR) is a collaborative approach to research that equitably
> involves all partners in the research process and recognizes the unique
> strengths that each brings. CPBR begins with a research topic of
> importance to the community and has the aim of combining
> knowledge with action and achieving social change to improve health
> outcomes and eliminate heal disparities (Kellogg Health Scholars,
> 2006).

Participatory methodologies involving photography are a specific category of techniques within CPBR.

Evaluation of CBPR

Studies of the effectiveness of CBPR have repeatedly shown that the methodology is valuable and deserves wider utilization. In a review of 1,800 cases of environmental decision making in the United States, researchers tracked the quality of decisions that did and did not involve stakeholders in some capacity (Beierle, 2002). Types of participation ranged from public hearings, to advisory committees, and negotiations with interest groups. The review used quantitative analysis to compare stakeholder and non-stakeholder-based decision making processes, and concluded that members of the public who are affected by decisions should be involved in the decision-making process as this practice produces verifiably better outcomes (Beierle, 2002). This quantitative review was a follow-up to a prior literature review that produced similar results in 1999 (Chess and Purcell, 1999).

Arguments for wider applications of CBPR continue to circulate. The use of participatory methods is gaining traction within the field of public health and has been framed as an alternative to the purely numbers-based studies that are often completed by epidemiologists to study disease transmission. Leung et al. (2003) argue that CBPR has the potential to improve trust between researchers and communities, make research socially relevant, promote structural change, and improve health through the deconstruction of power and democratization of knowledge. Epidemiologists, they say, need to increase their reliance upon these kinds of participatory studies (Leung et al., 2003).

Finally, multiple studies have indicated the need for standardization of research than can reliably be deemed CBPR. Researchers emphasize that CBPR must be an

emergent, ethos-based process (Beebeejaun et al, 2014; Greenwood et al., 2003). Those wishing to employ CBPR methods must first ensure that their research team is committed to the goals of involving the community in the research process. Further, they must be comfortable with the idea of risk: some projects will fail to have been truly participatory at their conclusion; for example, projects can sometimes evolve into a process where community members were included, but perhaps had input at only one stage of the process (Greenwood et al., 1993). These kinds of studies should not be deemed participatory.

Early on in the development of participatory research, Greenwood et al. (1993) identified that truly participatory work must have six specific qualities including collaboration, incorporation of local knowledge, eclecticism and diversity, case orientation, an emergent process, and the linking of scientific understanding to social action (Greenwood et al, 1993). Adherence to these six properties is a goal for anyone wishing to begin a CBPR project. The six qualities are summarized in the figure below.
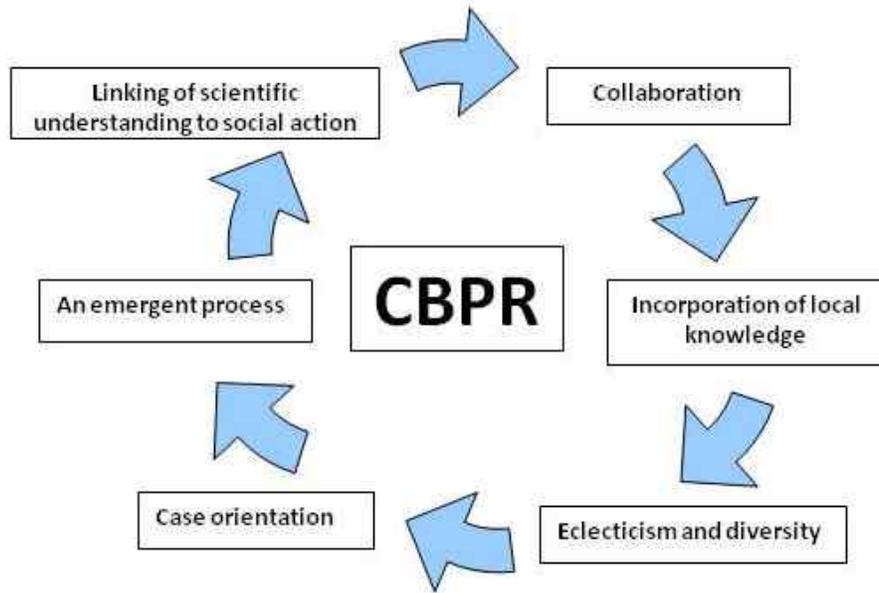
Figure 1: Six qualities of community-based participatory research (Greenwood et al., 1993).

Photovoice

Photovoice is one form of community based participatory research that is applicable to international animal welfare work. The method involves the use of cameras by marginalized populations to allow individuals to document their daily lives from their own perspectives. Through focus groups, the participants add captions to their photos, which become catalysts for change as they are shared with policymakers and other community and organization members. The following section outlines the photovoice method and explains its relevance to internamaintain a focus on.

What is Photovoice?

Researchers have argued that the dominance of text in the production of research has biased the information to include only the opinions of those who are privileged enough to read text (Wild, 2010). As such, theorists have devised means of conducting participatory research that do not rely heavily on the written word. Such tactics may include but are not limited to cartoons, drawings, photos from popular media, photography, installations, video, film and animation, art and painting, drama, dance, and other forms of performance (Beebeejaun, 2014). Proponents suggest that these methods may be utilized for both research and analysis of results. In general, it is argued that these methods of conducting research will be more intuitive and true to direct experience, which allows the data that are gathered to adhere more closely to reality than would be possible with traditional research methods. Beebeejaun (2014) also emphasizes that involvement of local community members in photovoice projects encourages local ownership of the results (Beebeejaun, 2014).

Visual methods are useful with groups that rely on oral communication and storytelling, and can be particularly suitable for children since they are sometimes hesitant to communicate in other formats (Harris and Manatakis, 2013). The produced materials can then be used to start conversations with children, policymakers, and stakeholders in an area (Maclean and Woodward, 2012).

Photovoice is a form of inquiry that has received great attention, particularly in public health research (Catalini and Minkler, 2010). The concept involves the distribution of cameras to marginalized populations with the goal of illuminating factors that affect the health of members of that population. The photographers are then supported in

writing captions to accompany the images that explain the intentions behind capturing those particular situations. The images are then used to inform policymakers and program implementers of the cultural contexts of their projects (Maclean and Woodward, 2013).

Initially referred to as photo novella, Caroline Wang and colleagues first described the methodology in 1996 to increase knowledge of women's health issues in rural China, inform policymakers of specific health and community issues in the area, and empower the women to participate in a government-funded rural development effort. The authors emphasized the significance of photography-based research in increasing practical knowledge that promotes action (Wang et al., 1996). Wang continued to utilize similar practices in a 2004 study of neighborhood violence in Flint, Michigan (Wang et al., 2004), among others.

Visiting researchers are unable to truly experience complex human interactions with and feelings toward free-roaming populations of companion animals. Often, this is purely a product of the investigators' statuses as outsiders to a community. Photovoice is an able means of summarizing human-animal interactions and animal-related cultural values. In cases where community leaders or outside organizations will determine final decisions for implementation procedures, the photographs and accompanying stories will represent the lived experiences of a larger group of individuals, which will facilitate greater efficacy of a given project.

Current Applications of Photovoice

Photovoice is continually promoted as an effective means of generating public understanding of community issues and involving the public in health (Lorenz and Kolb, 2009). It has been implemented in the United States, Guatemala, South Africa, Kenya, and India, among other places (Beh et al., 2013; Dongre, 2011; Lemelin et al., 2013; Lorenz, 2007; and Lykes et al., 2003). The subsequent section will summarize and critique photovoice projects conducted in Kenya and Western Canada.

Samburu, Kenya

In conjunction with a Kenyan university and the Human Dimension of Natural Resources Department at Colorado State University, Adam Beh of the Wildlife Conservation Society conducted a photovoice study with pastoral populations surrounding a protected area in Kenya to determine the local population's reactions to wildlife. The Samburu rangelands, as the area is known, are home to Grevy's zebras, reticulated giraffes, Beisa oryx, and other megafauna that repeatedly attract international tourists. The authors state that more than 20,000 tourists visit the area each year (Beh et al., 2013).

Having worked in the region before, the researchers began their project with an understanding of the local peoples, and with the potential to conduct snowball sampling based upon their own personal contacts. Their twenty-six photographers ranging from school-aged children to adult park rangers were sourced from various populations surrounding the protected area. The total number of participants was then divided into six groups to allow for manageable focus groups. Four separate focus group discussion

sessions taught the participants how to use their cameras, ethics of photography, and artistic technique. Their training model appears below (Figure 2). The project then culminated in a gallery viewing for which the participants chose to group image and display narratives.
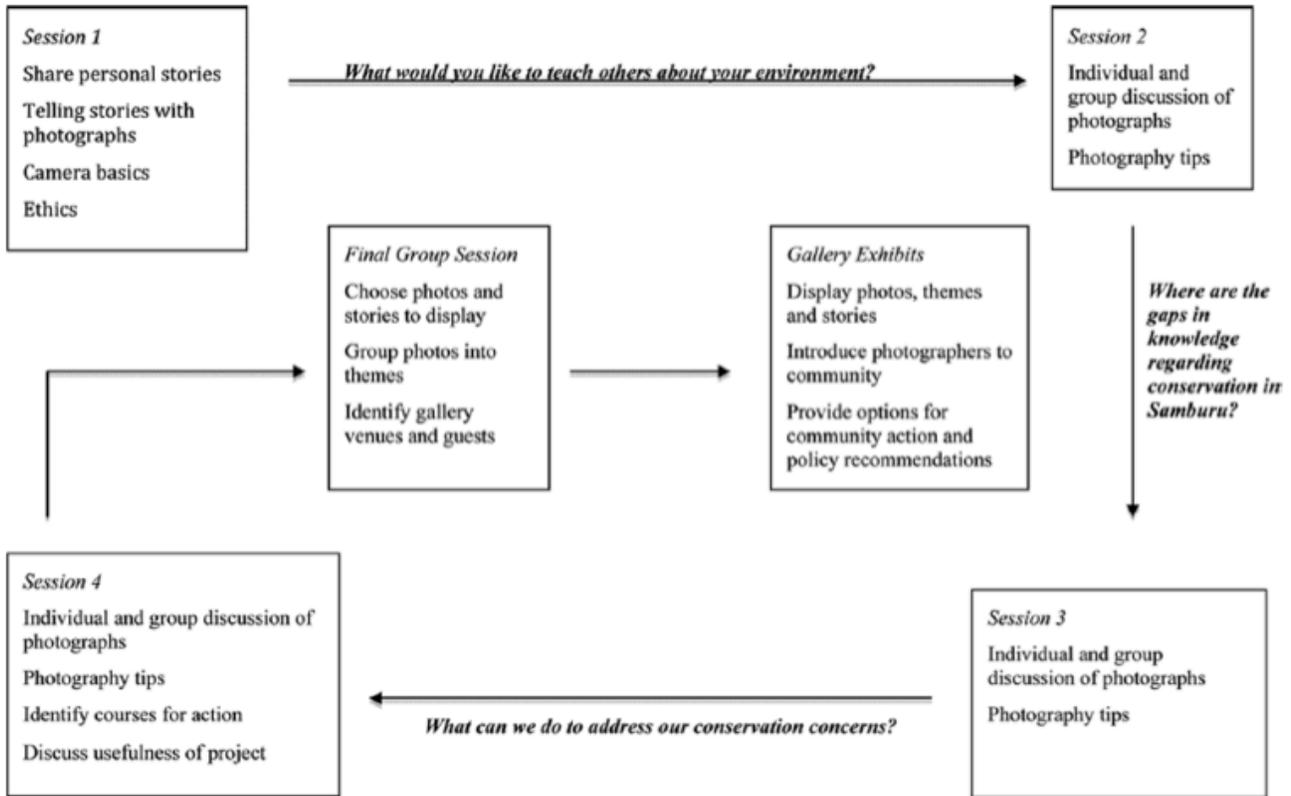
Figure 2: Photovoice focus group training model from Beh et al, 2013.

Researchers gathered valuable information from the photovoice project and were able to identify knowledge gaps that were causing conflict. For example, multiple participants photographed elephants de-barking trees in the area and expressed concern that the presence of these elephants was harming the local trees. In response, the research group was able to initiate tree nurseries in local elementary schools and trained scouts in

community outreach surrounding the health of those trees. These actions increased the participants' support of the photovoice project and the protected area, and decreased concern about the elephants' impact on the trees (Beh et al., 2013).

Finally, the researchers' sensitivity to the hierarchical nature of the Samburu communities facilitated their success in the project. Investigators created focus groups of peers based upon similar societal level so that all individuals could feel comfortable about sharing their opinions in a group setting. The resulting photographs were then shared with larger groups, which allowed individuals who were not normally permitted to provide input into the decision making process to express themselves through their images and captions; however, the authors repeatedly note the importance of outcome-orientated photovoice projects that are intended to create change. While presenting these images to community members was a vital step in the process of awareness and action, the research team was also involved in strategizing mitigation techniques to improve management of the protected area (Beh et al., 2013).

The Samburu, Kenya photovoice project informs future international animal welfare efforts. In Kenya, the researchers combined school-aged children into larger groups of photographers, but found that they needed to separate the focus groups anyway. This was a lesson learned: animal welfare groups will benefit from focusing on one age group at a time. Further, the Kenya project is an example of the use of photovoice to illuminate community issues surrounding a wildlife protected area, which indicates that participatory research practices are gaining support in the realm of animal protection. The next step recommended in this paper is the application of photovoice methods to international companion animal welfare efforts.

First Nation, Western Canada

Similar to conflicts between Americans and Native Americans, Castleden and Garvin (2008) identified the lingering mark of colonialism on indigenous groups in Canada, and turned toward photovoice as a means of addressing issues of injustice, inequality, and exploitation. They found that participant-employed photography allowed the community to identify its own issues, which aided in sourcing photographers from a population that has historically been hesitant to involve themselves in academic research (Castleden et al., 2008).

The researchers identify three goals of CBPR, namely power, trust, and ownership. Adhering to these three concepts, they note, will increase community ownership of and trust in a project. The study also mentions the efforts that the research team made to ensure that the project was completed as ethically as possible. For example, photography can be intrusive for a community: it can capture harsh realities while perhaps neglecting to identify contributing factors that are *not* present or readily available in a photograph. For this study, participants were provided with release forms that their photo subjects were asked to sign. The participants themselves were allowed to review their captions multiples times to ensure that they could identify and delete any statement that they feared could be politically damaging to them as individuals or to their community.

In their paper, the authors suggest a future adaptation to photovoice projects: include a feedback loop that engages the wider community in responding to the project's photographs, captions, and findings. The authors emphasize that researchers must be prepared to adapt their methods to local realities and culture as the project unfolds.

Lessons learned along the way should immediately be adopted to improve the study process.

International animal welfare groups will benefit from four concepts developed from this Canadian study. First, the concepts of power, trust, and knowledge should be central to the design of any community-based project. Second, consent forms should be utilized whenever possible. In some communities, requesting that children acquire signatures from all of their subjects may be impossible, but the option should still be considered. Third, the children's narrative accompanying the photos should be considered for the impacts they may have upon community leaders. Children and adults alike should review these captions. Fourth, as mentioned above, the research process should be cyclical. Investigators must be prepared to alter their techniques as the project continues.

Application of Photovoice with Youth to International Companion Animal Welfare

The process of photovoice is uniquely adapted to informing the initiation of projects related to international companion animal welfare. By involving local community members in the project development process, the use of photovoice will promote interventions that are relevant to specific cultural areas and will increase the likelihood of sustainable, long-term change. The following section suggests ways to ethically and effectively apply photovoice to international companion animal welfare work.

Why Should My Organization Utilize Photovoice?

Managing animal populations has an effect on the human populations living in those areas: resources allocated toward various species are therefore not available to the people. While this statement may seem immobilizing if human needs are placed above animal needs, my belief is that animal and human welfare efforts should be complementary, not exclusionary. Aid groups concentrate on development topics ranging from food sources, water sources, cultural protection and relativism, to wildlife and companion animal protection. Each of these issues is relevant to local well-being and should be addressed, but the presence of various and sometimes conflicting forms of aid efforts requires that research groups and welfare agencies understand their place within the larger context of a society. Similarly, researchers are responsible for developing a project rationale and situating their efforts within the norms of a given society. Doing so should also strengthen local adoption of and support for a project such that the effort will be long lasting and sustainable. Photovoice is one means of accomplishing these goals.

Previous research has indicated that opinions about companion animals vary across cultures. In one study, students at universities around the world were surveyed about their attitudes toward animal rights and welfare. The final list of countries included China, Czech Republic, Great Britian, Iran, Ireland, Macedonia, Norway, Serbia, South Korea, Spain, and Sweden, thus representing a broad range of cultures in Europe and Asia. The statistical results from the survey suggest that Macedonia had the highest animal welfare index followed by Serbia, Great Britain, and Ireland, which were tied. Researchers identified Pythagoreans' respect for animals as the basis for high valuation of various species in Macedonia and Serbia. The study also identified a positive

relationship between mean student expenditure and that country's placement on the list, and emphasized the need for researchers to understand international patterns of animal valuation along with their historical justifications (Phillips et al., 2012). This study demonstrates that cultural opinions surrounding animal welfare vary by region and supports the need for community-based inquiry surrounding the topic prior to any planned interventions.

Local residents and policymakers may have opinions regarding the management of companion animals. Previous research has verified that there is little to no agreement in policies governing animal welfare around the world (White, 2013). If an organization wishes to initiate a management policy for dogs (i.e. spay-neuter programs, shelter model implementations, etc.) it should first seek to gain an understanding of the local people's support for such an effort. Perhaps, for example, some dogs are used as food, as they are in Korea. Even though dogs are consumed in the area, certain breeds hold familial value and are kept as pets. This information, collected during a survey designed by the International Fund for Animal Welfare, International Aid for Korean Animals, and the MORI poll, is invaluable for any group seeking to plan an intervention for companion animal welfare (Podbersceck, 2009). Such a group may find that efforts to value dogs are best targeted toward breeds that are consumed since their welfare may not be ideal leading up to their slaughter. Dogs residing within the home, however, may already hold emotional value and may therefore have better welfare.

In summary, photovoice is an effective technique for elucidating patterns of animal valuation and support for animal welfare protection. If an incoming organization wishes to provide aid to companion animal populations, it must first gather information

regarding the current state of the matter in the area. Proper utilization of photovoice will accomplish this goal and will also garner local support for a project by allowing community members to have input into the design of the effort.

Are Youth the Best Target Population?

Youth are a suitable population for animal welfare-based photovoice projects because young people are naturally inclined to invest themselves in new materials and practices. One way to engage with youth is to work with local schools and groups of students in classrooms. Previous studies have also identified three strengths of engaging young students in participatory projects: (1) students' attitudes may changed based upon their involvement in a project, (2) young children exhibit an interest in animals, and (3) photovoice can have a positive effect on school-aged children. These three principles will be addressed below.

Involving students in participatory research efforts can increase their understanding of and devotion to the research topic. Though unrelated to international animal welfare, an American study that engaged young, African American girls in scientific topics provides insight. Over the course of one year, eighty-nine female students participated in weekly focus groups that culminated in a science fair where they presented their projects (Buck et al., 2014). This process can be seen as analogous to a photovoice project where participants are involved in focus groups surrounding camera techniques and caption development, which conclude with a gallery-type display where the students present their work. In the elementary school study of engagement with science, researchers found that the majority of participating students increased their

attraction to science and self-efficacy in science education. Following the project, the girls reported increased interest in the topic and future plans to continue their studies (Buck et al., 2014).

If international animal welfare organizations successfully involve youth in photovoice studies, they may find that the children bring their interest in animals into their households and discuss the topic with their parents. Overall, this type of photovoice project could have a positive effect on a community's engagement and investment in animal welfare.

When given the opportunity to express their personal values, children have indicated an interest in animals within the community. In an effort to value the voices of young adults, the Australian Departments of Education and Child Development conducted mass surveys of youth that were used to inform public policy. Given that the children's writing skills were still developing, the youth were instead involved in research techniques that concentrated on art, dance, music, song, drama, storytelling, and photography. The results from the study indicate that the children were interested and invested in the animals around them. Many children expressed enjoyment of caring for their pets or farm animals, and documented the species that they encounter in their communities (Harris et al., 2013). My own experience in Ghana suggests that children in developing nations can have a strikingly similar devotion to pets and other animals within their communities (see page 26). As such, international animal welfare organizations should recognize that children have a great interest in animals, and are therefore a preferential group for a photovoice project aimed at understanding local attitude and behaviors surrounding companion animals.

Finally, photovoice can have a positive effect on youth development. A group of researchers from the Johns Hopkins University Center for Adolescent Health conducted a photovoice study with youth in Baltimore with the explicit goal of adapting the technique to youth populations and verifying its effectiveness. The students were asked to photograph dangerous or problem areas within their communities and, following the gallery presentation of their images, 91% of the students declared their enjoyment of the project. The researchers also noted students' satisfaction and empowerment in their discussion of the project. Students seemed to be particularly satisfied when community officials took interest in their photographs during the gallery exhibit. The researchers note that permitting the students to reflect on their communities allowed the participants to develop their own senses of responsibility and place within those communities (Strack et al., 2004).

International animal welfare groups will benefit from gearing their photovoice projects toward youth populations. As mentioned, youth may be readily accessibly within schools and will likely express excitement about engagement in the project. Their interest in animal welfare will likely continue after the project has been completed. Finally, children can benefit positively from participation in a photovoice study intended to initiate a process of change.

Learning from the Field: My Experience in Ghana

In 2012, the author spent eight weeks living and working in Accra, Ghana with a non-governmental organization called Attukwei Art Foundation (AAF), a group that aims to empower and educate children through artistic expression utilized as a therapeutic medium. Throughout this time, a group of five volunteers led lessons at three different schools each week. Of these three schools, AAF determined that The Coming King would be the optimal location for my photography-based project due to having the smallest class sizes and substantial support from the school officials. After six weeks of teaching a variety of subjects, I provided the oldest class, class 5, with disposable cameras. These fifteen students ranged in age from fifteen to twenty two, which is common in an area where many children take time off from school to work to support their families. The students were instructed to keep the cameras for three days, photograph as many animals as possible, and to photograph humans and animals together. The resulting photo collection provides an overview of human-animal interactions in Ghana that is similar to what an international animal welfare group might find if it were to run a similar project in Accra.

This effort provides insight into animal welfare-based photovoice projects in several ways. First, certain Ghanaian cultural values made it difficult for a foreigner to photograph freely, which necessitates the involvement of individuals belonging to the studied culture in photography-based projects. Second, differences between the students' photographs and those of an outsider (myself) create a stark contrast, depicting the value of having local community members take pictures. Third, upon returning the cameras, students emphasized their enjoyment of the project as well as their interest in the animals

that they had photographed, suggesting that children are an appropriate, enthusiastic audience for this kind of project. Each of these topics will be discussed further below.

Foreigners and Photography in Developing-Country Settings

       As an outsider, I personally attempted to photograph human-animal interactions in the area. Of interest here is the Ghanaian public's negative attitude toward being photographed. Customary behavior in the area requires the photographer to request permission from anyone whom he/she wishes to record, particularly if the photographer does not belong to the local culture.

       In my own experience, the answer to the question, "Can I take your picture?" was often, "No." This limitation suggests that an outsider would not be able to accurately document the range of animals in the area, particularly those animals' interactions with humans in proximity to the home. For example, I once encountered an older gentleman with a pit bull-type dog on a chain leash outside of a large market. After greeting him in Ga, the local language, I kindly asked if I could take a picture of him with his dog. Immediately becoming agitated, the man demanded that I pay him for the photo. Knowing that I had unfortunately offended this individual, I quickly regressed, apologized, and understood that I was likely being interpreted as an intruder to the local culture. I also missed the opportunity to document a rare event where a dog could be seen on a leash, while one of my students would easily have been able to capture that photograph without engendering the opposition resulted from my status as a foreigner.

       Any group that is interested in working with animal populations in a new area should strive to understand how those animals may effect the lives of local peoples, so

complete documentation during a photography project is vital. Similarly, these groups should avoid intruding upon cultural norms whenever possible, including those surrounding the practice of photography. Giving control of the camera and data-generation process to youth members of the local community is one solution.

The Value of Community Members Taking Photos

Additionally, I found that my students were able to procure images of various animal species residing within their homes. As an outsider, I was unable to capture many indoor photographs of animals. Of note was one particular image from a student's camera that depicted a young border collie mix puppy wearing a chain collar and being walked by an adult just outside of the home, as seen in Figure 3. The image is taken from inside of the home with the front door open and shows a family member spending time with the animal.

Figure 3: Ghanaian family walks young border collie puppy (Ghana Photo Book, 2012).

Upon reflecting on this image, I recognized the chain and front door. In fact, I had walked past this house twice a day, three days a week for the past couple of months. The home is sturdier than others, yet modest, and suggests that the residing family likely struggles to afford sustenance. Having only been able to see the dog chained to a point inside of the home, I assumed that the animal was kept there because he was not welcome inside, and that the family did not pay much attention to him. Obviously, this was not the case and providing this particular student with a camera allowed him to document the fact that his family feeds and cares for this puppy, a companion rather than a working animal, while choosing to live in close proximity with him.

This photo provides potentially valuable information to any animal welfare group that is seeking to work with dogs in Accra: some Ghanaian families have an attachment to the species and enjoy the company of dogs inside their homes. The concept of dogs as

pets, allowed inside the home could be explored through interviews or focus groups discussions with local residents.

Youth Photography as Fun and Educational

The last quality of the photovoice method that contributes to its success and relevance to animal welfare change efforts involves the students' enjoyment of the process. After three days with their cameras, students returned to the classroom with bright, enthusiastic smiles. Many expressed their gratitude through hugs and requests for similar project in the future. Other classrooms of students began requesting to do their own photography projects. The students' excitement is evident in many of the resulting photographs, which display fellow classmates enthusiastically holding animals or simply posing with clear enjoyment.

During two separate lessons, students were asked to write essays about their favorite animals as well as the ways in which they relieve stress. For both topics, many students of various ages passionately wrote about the ways in which spending time with their cat, dog, or bird makes them feel better. These young students were quite eager to participate: a group of adult participants might not feel the same level of excitement about a participatory project concerning animal welfare. Thus, engaging peer groups of people of different developmental stages in recommended. These categories may include elementary-aged children, high school students, or young adults. Such projects could occur separately or in parallel and could involve examining historical photographs while discussing their meaning or relevance to animal welfare today (Lemelin et al., 2013).

These types of complementary projects might be a way to involve older (university) students or student interns in a regional or national capital.

A Cautionary Note

My experience in Ghana appears to indicate that youth in developing countries may be an effective population for future, animal-centric photovoice projects intended to initiate a process of (1) understanding the local context through the eyes of local inhabitants and (2) encouraging awareness, behavior change, or policy change related to welfare of cats and dog. However, the Ghanaian photo project has limitations in its application to future animal welfare-based photovoice projects. Primarily, it was not a full photovoice project: while the students did have disposable cameras and took pictures that were combined to form a photobook, the photographers did not caption the photos, thus making it more difficult to interpret their meaning for the photographer. Ideally, photovoice involves caption writing as well as photography, and both become data for understanding and, potentially, decision-making. Individuals or groups must be given the opportunity to summarize the principles that they intended to capture with their cameras. In the case of The Coming King, this expression was not possible because limited funding and access to technology (e.g. photo processing and printing) meant that the photos could not be printed on-site and instead were only developed from the cameras once I had returned to the US. Improvements in digital equipment, reduced costs, and increased capabilities of portable color printers may facilitate the use of these methods in resource-poor settings. Engaging participants over time would allow for caption writing and the preparation of outreach products such as booklets or exhibits, if desired.

It should also be noted that initiating a photovoice project with youth from certain populations could be logistically challenging, particularly because the children may never have used a camera before. Any group interested in beginning a similar project should expect to invest time into teaching the children how to use the cameras, as I did with my Ghanaian students. These lessons must include steps as introductory as which button to press to take a picture and the way in which the camera should be facing so that the students do not accidentally photograph themselves. More than likely, this instruction will prove to be extremely valuable for the students, as it was for mine. Young children are frequently excited to participate in anything that is novel to them, and photography is no exception. Of course, the necessity of such lessons also depends upon the affluence of a particular geographic area and their access to cameras.

Overall, this Ghanian photo project summarizes some of the strengths of photovoice with youth in providing an in-depth understanding of animals present in a certain area as well as their value to local human populations. In sum, children will be excited to participate and use their cameras, and will often have closer contact with animals than adults. The data (photographs and captions) gathered through such a project will illuminate local realities and support further efforts to improve companion animal welfare in the local context.

Ethical Considerations

Providing cameras to local residents of any age necessarily raises ethical concerns that can be safely addressed. Any organization seeking to complete a photovoice study should be cognizant of the ethical concerns involved in participatory methods that use

photography. While participatory research is generally deemed ethically superior to researcher-dominated forms of inquiry, adherence to participatory approaches requires that investigators be truly invested in producing positive results for a given community. Some researchers have viewed CBPR as ethical only when the results of the studies were directly beneficial for the involved communities (Mikesell et al., 2013). Further, a recent literature review of photovoice studies indicated that only some committed themselves to social justice, and the authors encouraged future researchers to devote themselves to this goal (Sanon et al., 2014). In addition, the photovoice method raises its own particular ethical concerns. The following section summarizes some of the ethical considerations for photovoice that have been addressed in the literature.

Photovoice projects must be grounded in the premise of goal-oriented research. The photographs produced should be used to initiate change and improve social justice: without this quality, participants may feel as though their effort was futile (Lorenz and Kolb, 2009; Sanon et al., 2014). International animal welfare organizations utilizing the photovoice process should be careful to incorporate the findings of their photovoice project into any planned interventions. Photovoice participants should be viewed as valuable members of the research team, and their opinions should be considered when formulating future action. If, for example, the results of a photovoice project, through focus groups, indicate that community members do not wish to allow outside organizations to work with their companion animals, then the most ethical practice for that organization may be to leave the area without developing a follow-on effort in the local community. While such a decision may require sacrificing the organization's goals,

conducting projects only when the local community is receptive to such efforts will promote ethical practices.

Furthermore, researchers should be sensitive to their own goals for the photovoice project and should not allow those beliefs to control the creative process for participants. This statement is particularly relevant during the photograph captioning process. Researchers and focus group specialists should be careful not to influence the captions themselves and to truly allow the participants to express their intentions in capturing each image. Researchers can easily affect a story by the questions that they ask (Little et al. 2010). In one participatory study with English Gypsy and Traveller communities, for example, some participants felt that the survey questions were too intrusive into their personal lives. They also identified tension in their dual roles as community members and members of the research team (Beebeejaun, 2014). In this case, researchers identified post-facto that some of their questions were too prying, and made adaptations for future projects. They suggested that allowing for greater community ownership of the project reduces tension between community members and researchers.

Institutional review boards that approve research studies are ill adapted to review participatory research and often fail to adequately address whether or not individual studies are designed to be conducted as ethically as possible. In a paper intended for use by Research Ethics Boards (REBs), Khanlou and Peter (2005) identify five processes that board members should consider as they review studies using participatory methods. First, REBs should include members with knowledge of positivistic, naturalistic, or combined approaches. Second, REB members should familiarize themselves with participatory research techniques so that they have the capacity to identify "good" participatory

research plans. Third, REBs may want to develop overall ethical guidelines that they can then utilize to address individual studies. These could be similar to specific criteria that they used for other types of studies. Fourth, REBs should consider including members from the researched communities: these people may be uniquely able to identify whether participatory studies are ethical from the community's standpoint. Fifth and finally, Khanlous and Pter (2005) suggest that REBs recognize that not all topic areas are fit for participatory research. Research Ethics Boards should be prepared to suggest more suitable approaches for studying specific topics.

Although the above suggestions for REBs may not appear to be directly relevant to international animal welfare groups, investigators interested in conducting participatory research should be prepared to legitimize their efforts to an ethical review board. Knowledge of the five qualities above should aid in the success of such an effort. Projects should be designed with a solid knowledge of the ethical review process.

Ethical values related to a photovoice project intended to understand local animal welfare realities should include the following principles: generate knowledge that is valuable to the researched community, aim to improve social justice in the area, incorporate photovoice findings into future interventions, and utilize advanced knowledge of the ethical review process. Adoptions of these five qualities should maximize the ethical nature of any animal welfare-based photovoice projects.
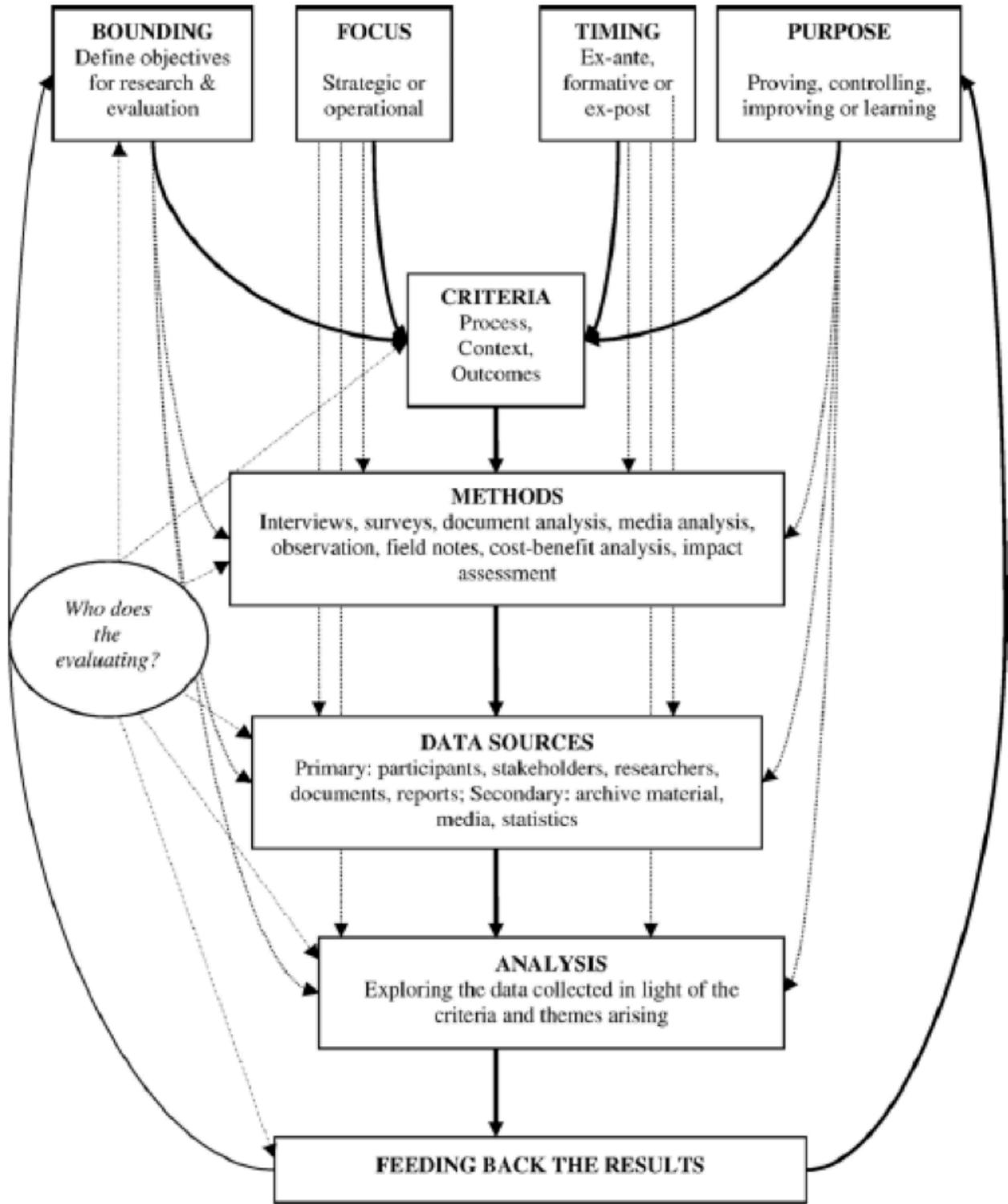
Evaluation

As with any other intervention or change effort, evaluation is a crucial step that is relevant to all animal welfare-based photovoice projects. Monitoring a program

throughout implementation will ensure that the effort adheres to its proscribed goals and expected outcomes. Evaluation begins prior to project implementation, continues alongside and in parallel with the program, and concludes only after final objectives have been analyzed.

Researchers have repeatedly called for the standardization of evaluation practices used in participatory work (Blackstock et. al. 2006; Reed, 2009). In general, the basic concepts of evaluation are applicable. The following diagram (Figure 4) outlines the cyclical properties of evaluation such that a project's objectives and outputs are continually addressed. Adherence to goals (bounding), successfully operating an intervention (focus), opportunistically choosing when to implement a project (timing), and stating the researcher's intentions (purpose) are all topics that must be addressed throughout each stage of the project.

Further, evaluation can be utilized to examine the success of a project. Funders and community members alike may wish to view the results of any project assessments. These materials should verify dedication to the well being of the community. As seen in Figure 4, the evaluation process should include the stages of program design, implementation, and analysis. The many feedback loops shown in the figure indicate the need for continual adjustments to projects (Blackstock et al., 2006).

Figure 4: The cyclical nature of the evaluation process (Blackstock et al., 2006).

Future Directions

The application of photovoice to international companion animal welfare work is one way to involve the community in animal-related work. A variety of other CBPR methods are applicable to conservation, environmental, and welfare-related efforts. If photovoice does not appear to be applicable to a specific project's purposes and goals, organizations should consider the multitude of other forms of CBPR.

Photovoice can be adapted to and applied in a range of animal welfare efforts. The literature suggests that the method would be equally suitable for depicting issues related to working animals or to wild species, not just companion animals. The Brooke Institute, for example, might find photovoice to be useful for community assessment efforts relating to working animals in developing-country settings. Involving youth in photovoice projects to improve companion animal welfare is just one of many possible applications of CBPR to working with and improving the welfare of non-human species.

Conclusion

The preceding narrative has argued for the application of community based participatory research to the field of international companion animal welfare. Specifically, the practice of participatory photography, known as photovoice, has been suggested for youth populations. Data gathered from this form of research will inform companion animal welfare oriented interventions such that they may be more acceptable to the local community and therefore may have greater long-term impacts.

Drawing from previous research, the current paper has highlighted the relevance of photovoice to the animal welfare field. By allowing community members to take photographs in their homes and communities, researchers will learn new information about places where they may not be allowed to go (Lorenz and Kolb, 2009), and the resulting information (photos and captions) will contribute to understanding the realities of companion animals within the local setting. The pervasiveness of CBPR in international development work suggests that animal welfare organizations will benefit from applying this technique, and photovoice is a particularly suitable tactic.

Before beginning any photovoice project, organizations should consider the necessary time and financial commitments. Researchers should be committed to the improvement of the local community and should allow this passion to guide their efforts. Promoting change that is beneficial to human and animal populations alike should be the goal of all interventions. This practice will improve the ethical nature of any participatory project.

In conclusion, animal welfare organizations must recognize the human aspect of their projects. Intervening on behalf of various species has automatic, unavoidable

impacts upon the local human community. Addressing (and understanding) this reality

prior to the design of a companion animal welfare project will aid in the success of any

change efforts and will contribute to community members' acceptance of the

intervention. Photovoice is just one means of accomplishing this goal.

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Appendix A: A Literature Review Table of Participatory Research and Participatory Visual Research in Public Health and Animal Welfare

Article	Brief Summary	Visual or Other CBPR Methods Used and Where	Applications for Current Project	Ethical Considerations	Limitations for Application to the Current Project
Beebeejaun et. al.; Beyond Text: Exploring Ethos and Method in Co-Producing Research with Communities; Community Development Journal; 2014	Summary of critiques of participatory research; ethos instead of set of tools; summary of storytelling, photography-based research, cartoons/animation, film. Includes discussion and critique of two case studies.	English Gypsy and Traveller community members were informants and co-researchers. Lobbying team created from people with a connection to a group for people with physical disabilities	Ethos vs. toolkit; In-depth description of challenges to community-based and beyond text work; introduction of term, "beyond text"; inner struggle for community members involved in co-production of research	Tension between being a member of the researched community and functioning as a researcher. Gypsies felt some of the survey questions were too intrusive. Lobbying intervention was text-based. Drafting of formal letters was difficult in a group setting. Community member decided to make a video on their own- this was not intended or planned by the researchers.	Little discussion of photovoice and communities limited to England
Beh et. al.; Legitimizing Local Perspectives in Conservation Through Community-Based Research: A Photovoice Study in Samburu, Kenya; Society and Natural Resources; 2013	Photovoice used as CPBAR to encourage conservation efforts in Samburu, Kenya. Summary of community-based conservation efforts. Participants selected by snowball sampling and interest in conservation. 26 Photographers in total.	Photovoice in Samburu, Kenya	Emphasis that photovoice only allows community members to bring concerns to light; actual change requires work afterwards. First application of photovoice to conservation. Situated in East Africa. Some photographers were youth. Participants decided direction of project. First conducted focus groups with people of similar social status, then began to integrate- people were more comfortable discussing controversial topics.	Hierarchical nature of Samburu culture recognized in organization of focus groups	Lead author had been involved with this community for many years before the photovoice project was initiated. Participants were of many ages.
Beierle; The Quality of Stakeholder-Based Decisions; Risk Analysis; 2002	Review of environmental research that did and did not involve stakeholders in the US. Focused on whether or not the quality of decisions increased, contribution of innovative	Public hearings, advisory committees, negotiations with interest groups. 1,800 cases were screened for inclusion in the review. Participatory methods such	Evidence supporting argument that stakeholder involvement in decision making is useful. Quantitative analysis- the projects were evaluated based upon numerical outcomes.	Paper did not include any discussion of the effects that the participatory process might have had on underserved populations and instead only focused on outcomes.	The paper considered whether or not participants had access to accurate information, which is a consideration that will not be necessary in the current study since

Article	Brief Summary	Visual or Other CBPR Methods Used and Where	Applications for Current Project	Ethical Considerations	Limitations for Application to the Current Project
	ideas, and participant access to scientific knowledge. Researchers screen 1,800 cases from journals, books, dissertations, conference proceedings, and government reports to choose the 239 cases that were included in the review.	as these were used in at least part of every study.			participants will automatically be experts on the animals in their communities. US-based. Did not use photovoice.
Buck et. al.; Seeking to Improve African American Girls' Attitude Toward Science; The Elementary School Journal; 2014	30 African American girls between grade 3 and 6 participated in focus groups for a period of one year. The study was aimed at improving their attitudes toward science.	They used problem-based learning, science labs, and a science fair to increase interest. Focus groups were used to discuss interest levels.	This study was aimed at changing the attitudes of young girls toward science. Many animal welfare groups hope that communities will change how they feel about animals, so there may be similar goals.	Students could drop out of the group if they so chose. Participating in the study posed little risk for the girls (circumstances may be different in other countries).	Researchers were not able to generalize to African Americans or even adults. This will likely be true in the current study as well.
Blackstock et. al.; Developing and Applying a Framework to Evaluate Participatory Research for Sustainability; Ecological Economics; 2006	Linking participatory research and sustainability to the principles of evaluation. Includes conceptual diagram for designing participatory research. Includes basic summary of how to evaluate: beginning with objective, timing the evaluation, and intention of evaluation. Includes a list of possible criteria for evaluations.	Analysis of all participatory research (PR) methods	Suggested criteria could be useful for evaluating photovoice projects.	N/A	Does not include photovoice specifically and many of the criteria may not be appropriate for the current study.
Castleden et. al.; Modifying Photovoice for Community-	Photovoice project completed with Indigenous populations in Canada. Contains quotes	Photovoice, advisory committee	Explains why photovoice is a culturally appropriate method. Critical analysis of strengths and weaknesses of photovoice.	Contains in-depth ethics section. The group used training sessions for photographers, signed consent	Very applicable to the current project in terms of an ethical and respectful process that engages

Article	Brief Summary	Visual or Other CBPR Methods Used and Where	Applications for Current Project	Ethical Considerations	Limitations for Application to the Current Project
Based Participatory Indigenous Research; Social Science and Medicine; 2008	from Huuay-aht First Nation members about their reactions to photovoice. Explains the process of using photovoice as a CBPR method.			forms from photographed individuals, transcription verification from interviews to ensure that no harmful information was printed, and photograph release consent forms.	respected members of the community in developing/reviewing project process, but does not address animals.
Chess et. al.; Public Participation and the Environment: Do We Know What Works?; Environmental Science and Technology; 1999	Literature review of studies that have used public participation to make decisions about the environment.	Public meetings, workshops, advisory committees	Photovoice can be combined with some of the methods discussed in this paper. Evaluation criteria are also included.	Some studies suggest that participant satisfaction with process is linked to outcome	Not photovoice and generally not immediately relevant, but includes evaluation criteria for different forms of participation.
Dabaieh; Participatory Action Research as a Tool in Solving Desert Vernacular Architecture Problems of the Western Desert of Eqypt; Action Research; 2013	Utilizing PAR to preserve desert vernacular architecture in Egypt. Includes long descriptions of the local area and culture. Summary of what PAR is and the general model. List of the researcher's roles in the process.	Seminars, focus groups, design and evaluation of model house	Description of how PAR shaped the project. List of roles for the researchers.	Not discussed in the study.	Not photovoice, not Africa, not animal-related. Mainly useful as example of participatory action research process.
Dongre; Photo-elicitation as a Public Health Teaching and Learning Tool; Education for Health; 2011	Photo-elicitation project completed with public health students in India. Students photographed situations effecting public health in a nearby village and subsequently reflected on the images.	Photovoice/photo-elicitation (paper does not use the term photovoice)	Explains the importance and use of photovoice in an academic setting and/or for engagement and dialogue starters	None included in the study (LTE)	Pertains specifically to an academic setting (school).

Article	Brief Summary	Visual or Other CBPR Methods Used and Where	Applications for Current Project	Ethical Considerations	Limitations for Application to the Current Project
Faridi et. al.; Community-Based Participatory Research: Necessary Next Steps; Preventing Chronic Disease; 2007	Includes the Kellogg definition of CBPR and the history of the term. References to suggested lists of competencies for researchers using CBPR. Calls for standardization in the field. Includes case studies from Madagascar, Zimbabwe, Ethiopia, and Swaziland.	None- a review.	Contributes the understanding that CBPR is currently a very broad term. Also recognizes that researchers are calling for standardization.	Not discussed in the study.	No specific references to anything being done in this project, but will be useful for future directions and steps regarding process and intent.
Greenwood et. al.; Participatory Action Research as a Process and as a Goal; Human Relations; 1993	Disconnect between participatory intentions and actual process of projects. Provides 6 characteristics of a participatory process.	Various general approaches to PAR utilized in the three case studies presented.	Participatory research is an emergent process- one can enter a project with a mindset, but things may change. Researchers must be flexible.	Organization should recognize that they must be flexible if they are to remain ethical and committed to the participatory process.	Not specific to photovoice or this project, though provides good knowledge for organizations and useful framework to guide project design.
Hackel; Community Conservation and the Future of Africa's Wildlife; Society for Conservation Biology; 1999	Critique of CBC and whether or not it will protect Africa's wildlife in the long run. Even if people are convinced that conservation is economically useful right now, they may not believe so should another economic opportunity arise. Includes three case studies of CBC efforts. CBC is easier to talk about than to do. Includes case studies from Madagascar, Zimbabwe, Ethiopia, and Swaziland.	CBC and CBC projects are referenced generally. References the use of game parks for economic value, particularly from tourism. Reference afforestation in Ethiopia.	Researchers must be flexible because people's opinions of their environments may change over time. Researchers also must use the tools of CBC (or photovoice in this case) to ensure that people's livelihoods are not vastly impinged upon. Frames the animals as economically valuable.	Again, emphasis on flexibility and need for researchers to establish close relationships with local people in order to ensure that their wellbeing is preserved or even improved. Do game parks sufficiently benefit local people to legitimize their existence or are the people only periphery to conservation issues? What happens if another opportunity is more economically valuable than conservation?	The author is rather negative about CBC, which will be useful for the limitations section of photovoice, but in general photovoice should be seen as a good tactic for this context.
Harris et. al.; Young Children's Voices About	Participatory approach was used to engage children in State Strategic Plan in Australia.	Role playing, photography (especially in rural areas), art, music, dance, song,	Section about excitement in the children about the cameras. Methods worked well for engaging all children, even	Researchers had to be mindful of power differences between adults and children and wondered if the children were	The study was only focused on Australia and animals were not the main focus.

Article	Brief Summary	Visual or Other CBPR Methods Used and Where	Applications for Current Project	Ethical Considerations	Limitations for Application to the Current Project
Their Local Community; Australesian Journal of Early Childhood; 2013	Children were likely to talk about animals and creatures with which they interacted.	drawing, storytelling in Australia	some with behavioral disabilities. Photovoice is only a first step in a longer process.	being honest. Feedback and uptake are integral to the process. It's not enough just to listen.	
Khanlou et. al.; Participatory Action Research: Considerations for Ethical Review; Social Science and Medicine; 2004	Discussion of the ethical concerns that arise in PAR. Starts descriptions of PAR, AR, and PR. Lists seven concepts that should be addressed in the ethical review of PAR studies.	None- discussion of necessary ethical review process for PAR	Useful for ethical consideration section. Organizations should be aware of how to evaluate their projects.	Many- seven categories are included in the paper including social or scientific value, scientific validity, fair subject selection, favorable risk-benefit ratio, independent review, informed consent, respect for participants.	Not all of these criteria may be applicable to any individual study. Should organizations be hiring a third party to evaluate projects? Ore perhaps set up a local group to provide input and feedback re projects?
Lemelin et. al.; A Dialogue and Reflection of Photohistory; Action Research; 2013	Researchers and community member reflect on the photohistory technique. Includes direct dialogue between the two. Often the outsiders photograph history, so this method allows local people to document what is around them and write accompanying stories.	Photohistory in Moose Cree First Nation. Locals add context to historical images.	Useful for discussion of how images can unite people. Historical photos could be used to initiate discussions of animals in the community.	Photohistory can help people reclaim images of their own communities. Photovoice can do the same in the present day.	Photohistory is retrospective while photovoice is intended to be prospective. Could be a complementary or first step to photovoice with youth. Older youth (eg high school, university) might be interested in doing this type of study (instead of taking pictures themselves).
Leung et. al.; Community Based Participatory Research: A Promising Approach for Increasing Epidemiology's Relevance; International Journal of	Argument for how CBPR can improve health. CBPR can help epidemiologists learn about the social context in which they are working. Findings can help promote structural changes, improve health, and prevent disaster. Focus on the deconstruction of power and democratization of	CBPR in general	Important for discussion of how widely applicable CBPR is and how relevant it is to this discussion.	CBPR can improve trust between researchers and communities. Makes research socially relevant.	Does not address photovoice or animals. People are more likely to be engaged in their own health (epidemiology) than the health of animals around them in most cases, at least prior to any awareness or change effort.

Article	Brief Summary	Visual or Other CBPR Methods Used and Where	Applications for Current Project	Ethical Considerations	Limitations for Application to the Current Project
Epidemiology; 2003	knowledge. Includes arguments for why epidemiologists should use CBPR.				
Little et. al.; Making Meaning in Muddy Waters: Representing Complexity Through Community Based Storytelling; Community Development Journal; 2010	Discusses psychosocial processes involved in storytelling and the practice's contribution to the accurate representation of knowledge. Researchers must be careful about how they record any stories. Ideally, the investigator who worked with the individual should record the story.	Storytelling in the UK	Participatory photography is often accompanied by storytelling or at least photo elicitation. Researchers should be well-versed in these processes.	Researchers can affect a story by the questions they ask, and this can affect accuracy. Researcher should be well trained.	Photovoice involves portions of storytelling, but is not completely reliant upon this method of communication. Generally only useful in communities that rely upon storytelling. If not training available may not be useful.
Lorenz; Visual Metaphors of Living with Brain Injury; Visual Studies; 2010	Photovoice project conducted with brain injury survivors. Includes detailed description of process including questions that were provided for participants. Also includes narratives of participants. The core part of the project occurred over a two month period. Participants were tasked to identify themes as a group. The study concluded with a formal exhibit.	Photovoice with brain injury survivors in MA	Very useful for process. The author provides a detailed description of her involvement in the process as well as participants' reactions to the project.	At one point, the author mentions that she felt the participants were feeling too challenged. Care must be taking to respect the well being of all participants. Also, efforts must be made to foresee how any published images may be interpreted by outside viewers.	Useful for process, but not directly relevant to animals or international work. Potentially useful if working with a cognitively disabled population is of interest, e.g. children with intellectual disabilities or delays.
Lorenz and Kolb; Involving the Public Through Participatory Visual Research Methods;	Exploration of aspects of photovoice for use in healthcare institutions. Includes case studies in Morocco and the US (see brain injury study above). Also describes cultural	Photovoice in Morocco and the US	Good descriptions of process and participants' reactions to certain word choices vs. others.	Methods successfully, safely engaged vulnerable groups. Can allow participants to express opinions that they otherwise would be hesitant to communicate.	Study does not involve steps to enact change post-project (though the authors acknowledge this).

Article	Brief Summary	Visual or Other CBPR Methods Used and Where	Applications for Current Project	Ethical Considerations	Limitations for Application to the Current Project
Health Expectations; 2009	context in Morocco. Final products were formally presented in exhibitions.				
Lykes et. al.; Narrating Survival and Change in Guatemala and South Africa: The Politics of Representation and a Liberatory Community Psychology; American Journal of Community Psychology; 2003	Participatory approaches used in Guatemala and South Africa to give people voices amidst political and military oppression. Includes detailed descriptions of the local cultures in both areas.	Photovoice, talking pictures, speaking out	Good description of photovoice's relevance for the context including its strengths in creating community change. For some, the photovoice interviews were their first chances to speak about their experiences. Created shared experiences among women who took pictures. Project focused on women, so another generally underrepresented group.	Introduction of "Western" technology into rural communities and project's economic unsustainability.	Study focuses on illuminating voices of underprivileged groups and, while this project will function similarly for children, it also includes the animal component. Illustrates a process of group captions, which may be useful to understand broader social attitudes or realities, not just those of individual students or particpants.
Maclean and Woodward; Photovoice Evaluated: An appropriate Visual Methodology for Aboriginal Water Resource Research; Geographical Research; 2013	Photovoice used to bridge gap between non-Aboriginals and Australiam Aboriginals for collaboration relating to water resource management.	Photovoice	Contains succinct overview of photovoice history and development. Emphasizes the broad applications of this method.	Analysis of how photos enabled community reflection, created dialogue, and influenced policy	Does not address issues with animals. Good if post-project engagement with community is of interest.
Mikesell et. al.; Ethical Community-Engaged Research: A Literature Review; American	Literature reviews of 57 articles that discuss ethics in CBPR	None- lit review	Discussion of CBPR only being ethical when researchers are invited to the community and when the results are beneficial to the community- how does this apply to animal welfare work?	Difficulties in getting CBPR through IRB and ethical situations being different from community to community	Does not address issues with animals

Article	Brief Summary	Visual or Other CBPR Methods Used and Where	Applications for Current Project	Ethical Considerations	Limitations for Application to the Current Project
Journal of Public Health; 2013					
Phillips et. al.; Students' Attitudes to Animal Welfare and Rights in Europe and Asia; Animal Welfare; 2012	European and Asian students surveyed about animal welfare issues	None- survey	Proof that values relating to animals differ across cultures (useful for introduction/background)	Not really ethical, but sampling bias- students were approached on campus and had to choose to participate, so participants may have been more interested in animal issues than the general population	Not visual or CBPR methods
Podberscek; Good to Pet and Eat: The Keeping and Consuming of Dogs and Cats in South Korea; Journal of Social Issues; 2009	South Korean adults surveyed about whether or not they eat cat and dog meat and whether or not they would support bans on either product. The paper concludes that neither dog or cat meat are major parts of the South Korean diet, but that most people would not support bans on the products. (study funded by IFAW)	None- survey	Proof that values relating to animals differ across cultures (useful for introduction/background)	International differences between the way cultures value various species of animals. Were the South Koreans who took this survey insulted by its content? Did they feel as though their culture was being undervalued?	Not visual or CBPR
Reed; Stakeholder Participation for Environmental Management: A Literature Review; Biological Conservation; 2008	Literature review of stakeholder participation. Summarizes eight best practices for stakeholder participation. Claims to focus on environmental issues, but seems to address participation more broadly.	Based on participation/stakeholder participation in general.	Good summary of the history of participation.	"Consultation fatigue may develop as stakeholders are increasingly asked to take part in participatory processes that are not always well run, and as they perceive that their involve gains them little reward or capacity to influence decisions that affect them." (pg 2420) Criticizes the tool kit approach to participation and emphasizes the need to view participation as a process.	Does not address photovoice or animals, though does focus on the environment.

Article	Brief Summary	Visual or Other CBPR Methods Used and Where	Applications for Current Project	Ethical Considerations	Limitations for Application to the Current Project
Sanon et al.; An Exploration of Social Justice Intent in Photovoice Research Studies from 2008-2013; Nursing Inquiries; 2014	Literature review of social justice impacts of photovoice studies between 2008 and 2013.	Literature review of photovoice studies.	Emphasizes need to adhere to social justice roots and ensure that this methodology is present throughout photovoice studies. These are good notes for any organization seeking to complete a photovoice study.	Without overt adherence to social justice intent, studies can/will be less ethical. Studies should aim to ameliorate social justice issues.	Does not address animals.
Strack et. al.; Engaging Youth Through Photovoice; Health Promotion Practice; 2004	Evaluation of Baltimore youth photovoice project.	Photovoice with youth regarding community issues	Good description of the positive effects that participating in a photovoice project can have on young people, including facilitating an understanding of their community. With youth, groups should be small and developmentally homogenous. Staff members at site for photovoice project should be committed to the lesson. Project should be tailored to the developmental needs/age of the particular group of participants. This paper recommends that projects last 4 to 6 months,	Lesson learned: group discussions must be completed in smaller groups than anticipated when youth are involved. Youth usually lack connections to the larger community and must rely on moderators, especially in the realm of policy change.	Does not address animals and all recommendation in the paper are tailored for developed countries. Useful if participation by youth from stigmatized or underserved group is of interest.
Van Dijk et. al.; Sustainable Animal Welfare: Community-Led Action for Improving Care and Livelihoods' Participatory Learning and Action (independent	Written in 2005, this paper is a prequel to "Sharing the Load," the handbook that was published by the Brook in 2009. The paper outlines strengths and difficulties in applying PRA (mostly) to working animal welfare. Intense, semi-intense, and extensive levels of working animal welfare are outlined allow	PRA, community assessments, "If I was a horse exercise"	First steps toward making animal welfare work participatory	Discussion section of the paper acknowledges that sometimes human needs must be met first or at least in parallel with animal needs. Participatory work relies on the concept that a community knows what is best for itself, but involving the third party (the animal) can be more complicated.	Does not address companion animals which are not inherently economically valuable to a community.

Article	Brief Summary	Visual or Other CBPR Methods Used and Where	Applications for Current Project	Ethical Considerations	Limitations for Application to the Current Project
document); 2013	with the course of action that they suggest for each one.				
Van Dijk et al., Sharing the Load; Practical Action Publishing; 2011	This is an entire handbook written specifically to outline intervention tactics for working animal welfare issues. The book begins with explanations of the Brook, working animals in general, and working animal welfare. It then provides guidance for how to assess working animal welfare and how to engage a community. Includes a list of 28 participatory action tools for animal welfare. Again uses the term PRA.	Various participatory tools relating to animal welfare	First steps toward making animal welfare work participatory. Provides many concrete tools, some of which could be applied to companion animal work.	Continues to address the complex overlap between human and animals needs. Emphasizes that community workers must be sensitive to the needs of the community itself.	Does not address companion animal issues.
Wang et. al.; Chinese Village Women as Visual Anthropologists : A Participatory Approach to Research Policymakers; Social Science Medicine; 1996	Summary of photo novella in Yunnan Women's Reproductive Health and Development Program (pre coining of the term photovoice). Explains photo novella and its utility, then summarizes the project and its limitations. Explains photovoice's feminist roots.	Photo novella (/photovoice) used to empower women and improve their health	Describes the photo novella process, includes its roots in Freire's philosophy	Explains complications in engaging an under-powered group including the need to include men and to be sensitive to making sure the women can actually work towards change.	Not animal related. Seminal article on using photography with illiterate local women as part of a regional development project. Good example of a way to include diverse voices in a change effort.
Wang et. al.; Flint Photovoice: Community Building Among Youths, Adults, and Policymakers;	Applies the term, photovoice, to the Yunnan Women's Project (above). Explains strength of photovoice to influence policymakers. Approximately 40 people of varying ages from	Photovoice with various community members	Outlines policy changes that have occurred because of the project including a CDC-funded youth center. Opened the door for photovoice participants to communicate with policymakers.	The short field report does not address limitations. The necessary size of a photovoice project is interesting- is 40 people enough?	Not animal related. A large project like this would be challenging as a first project – good example of a second or third-level project intended to instigate change.

Article	Brief Summary	Visual or Other CBPR Methods Used and Where	Applications for Current Project	Ethical Considerations	Limitations for Application to the Current Project
American Journal of Public Health; 2004	Flint, Michigan were engaged in the project				
White; Into the Void: International Law and the Projection of Animal Welfare; Global Policy; 2013	Summary of current national and international law regarding animals welfare as well as recommendations for future actions. Places the OIE as the center of international animal welfare law. Mentions the possibilities of a Universal Declaration of Animal Welfare (UDAW) or an International Covention for the Protection of Animal Welfare (ICAW).	None- legal summary.	Good starting point for discussion international animal welfare. Important to note that there are currently no laws or international agreements relating to the topic.	Discusses the OIE and possibilities of UDAW or ICAW, but does not address the needs of developing countries, many of which may have a very different view of the need for international animal welfare law.	Does not address on-the-ground, grassroots level action and is more focused on the efficacy of international law.

Appendix B: Best Practices Checklist for Community-Based Participatory Research (CBPR)

The list of suggestions included here is intended to provide international animal welfare groups with considerations that should be addressed while planning and implementing a photovoice or other type of CBPR project that is dedicated to improving the well being of companion animals. The following recommendations are grounded in a review of the CBPR and photovoice literature (Appendix A) and the author's field experience in Ghana.

1) Establish relationships with local populations prior to implementing an intervention (Beh et al., 2013).

2) Group participants into focus groups of peers based upon age and/or social status (Beh et al., 2013).

3) Be aware of other development projects in an area and place any efforts within the context of the realities of the local society. Be able to legitimize the outcomes of a project for the local community. (Strack et al., 2004)

4) Stay focused on the wellbeing of the community, and make positive results for local populations the goal of any project (Mikesell et al., 2013).

5) Protect the safety of all participants (Castleden et al., 2008).

6) Create small focus groups, especially for youth populations (Strack et al., 2004).

7) Be flexible and be prepared to adapt project approaches mid-study based upon data gathered from participatory methods (Castleden et al., 2008; Greenwood et al., 1993). If necessary, be prepared to vacate an area due to local expereince and attitudes toward specific kinds of aid.

8) When conducting a photovoice study, allow ample time for participants to reflect upon their photos and prepare captions so that participants' intentions are clear (Lorenz, 2010).

9) Continue to explore CBPR findings with other methods of research (Chess et al., 1999; Beierle, 2002). Conduct goal-oriented research and follow through with initiating changes that will be beneficial for the society (Sanon et al., 2014; Beh et al., 2013).

10) Evaluate all projects throughout their implementation (Khanlou et al., 2003; Blackstock et al., 2006), and maintain a focus on the well being of the entire community (humans and animals) (Strack et al., 2004).

Appendix C: Links to Recommended Photovoice Resources

1) "Doing Your Own Photovoice Project: A Guide"

> Developed by photovoice experts, this guide provides succinct directions for running your own photovoice project that are intended for use by facilitators. The document contains sample photo consent forms.

> http://www.brainline.org/multimedia/presentations/photovoice/Photovoice_Facilitators_Guide.pdf

2) Photovoices International

> Dedicated to providing cameras to marginalized populations around the world, this organization has partnered with National Geographic, the World Wildlife Fund, and other well-known groups. Photovoices International's website provides information about ongoing projects and their methods.

> http://www.photovoicesinternational.org/about_photovoices.html

3) WWF Indonesia

> Alongside Photovoice International, WWF has been able to depict conservation through the camera lenses of local community members. The project's website displays many of the images that the group has acquired and depicts the relevance of photovoice to animal-related work.

> http://www.wwf.or.id/en/about_wwf/whatwedo/climate/resouces/?3480/Photovoices---Conservation-from-Peoples-Point-of-View

4) Photovoice

> As another international group committed to spreading the practice of photovoice, this organization focuses on developing long-lasting partnerships with all involved communities.

> http://www.photovoice.org/vision-and-mission/

5) A Guide for Photovoice with Youth

> Written by the National Indian Child Welfare Association, this brief document provides clear, succinct tips for successfully conducting a photovoice project with youth populations.
>
> http://www.pathwaysrtc.pdx.edu/pdf/proj5-photovoice.pdf

6) Youth Photovoice: An Implementation Toolkit

> This document summarizes the Wastenaw County Public Health Department's approach to photovoice with young populations. Included information includes suggests ground rules for project meetings and best practices for facilitators.
>
> http://www.ewashtenaw.org/government/departments/public_health/health-promotion/substance-abuse-prevention/pv_toolkit.pdf

7) Photovoice: Train the Trainer

> This powerpoint is intended to be used as a training for those interested in running a photovoice project. It was organized by Kaiser Permanente and includes all steps involved in completing a photovoice project.
>
> http://norcalheal.cnr.berkeley.edu/docs/Photovoice_Training

Appendix D: Suggested Focus Group Discussion Questions

The following questions may be utilized in any order and are meant to provide starting points for focus group discussion of collected photographs during a companion animal welfare-focused photovoice project.

1) Why did you choose to capture this photo?

2) What is your connection to the animal in the photograph?

3) Is this situation a common sighting in your community?

4) What types of companion animals are common in your community?

5) What is your favorite kind of animal and why?

6) Please tell me about your most memorable interaction with an animal.

7) Does your family provide care for a cat or dog?