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AN INQUIRY INTO ECO-LABELING: THE PROMISE OF PREDATOR FRIENDLY CERTIFICATION (PFC)

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THE PROMISE OF PREDATOR FRIENDLY CERTIFICATION (PFC)

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ABSTRACT

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An Inquiry into Eco-Labeling: The Promise of Predator Friendly Certification (PFC)

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Agricultural landscapes play key roles in preserving biodiversity through habitat protection while providing ecosystem services necessary for rural livelihoods. There is a small, but growing movement among agricultural producers to live with nature rather than to dominate nature. Within this larger agriculture movement are efforts to live with predators rather than eliminating them through lethal means. This is reflective of the changing conversation around predators in the New West. Means of co-existence include livestock guardian animals, electric fencing, fladry, range rider patrols, rotational grazing, and lights etc. One grassroots effort in this area is Predator Friendly Certification (PFC). PFC is a 2nd party verified eco-label that embraces and merges the notions of agriculture and conservation through the utilization of such innovative strategies. In theory, eco-labels offer the dual promise of price premiums and simultaneous environmental benefits, certifying a commodity's process of production and unique quality. PFC offered a distinct opportunity to better understand the promise and future advancement of a particular, grassroots eco-labeling effort.

This qualitative research study interviewed 17 PFC producers, 8 potential producers who inquired yet chose not to seek PFC, and 5 members of the PFC founders circle. PFC efforts provided insight into the growing phenomenon of eco-labeling as a strategy employed in the alternative foods movement to address process and quality. Notably, despite the fact that PFC is not generating a price premium, small numbers of dedicated producers utilize these practices because of their philosophical and ethical commitments. According to those interviewed, 3rd party verification is critical for marketplace expansion, institutional accountability, and future price premium generation for values-based eco-labels. This research generated suggestions for PFC to increase participation and marketplace expansion as the eco-label transitions to another eco-label, Certified Wildlife Friendly (CWF). These findings also indicate that interest in ecosystem health is equally as important as animal welfare for producers. Facilitating partnerships with the 3rd party verified eco-label Animal Welfare Approved (AWA) may help expand the values of PFC/CWF to a larger circle of producers and consumers in the marketplace. Lessons learned from PFC's struggles and evolution are valuable to any grassroots values-based labeling effort.

Keywords
Agriculture, Conservation, Native predators, Eco-labeling, Predator Friendly Certification (PFC), Lack of Price Premium Generation, Sustainability

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"*There are two spiritual dangers in not owning a farm. One is the danger of supposing that breakfast comes from the grocery, and the other that heat comes from the furnace*." --- Aldo Leopold, A Sand County Almanac

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PREFACE
FARMING WITH THE WILD

"Conservation implies self-expression in the agricultural landscape rather than blind compliance with economic dogma"
-Aldo Leopold

Agricultural activities account for enormous environmental alterations that result in the loss of habitat and biodiversity. The zero sum competition between agriculture and habitat is not necessary. Living with carnivorous predators is a daunting proposition for some farmers and ranchers in terms of economic viability and social acceptance (Muhly and Musiani 2009). However, an ecosystem devoid of keystone predators such as wolves, grizzly bears, and cougars is a landscape poorer in long-term ecological integrity (Eisenberg 2010). Throughout the history of United States domestic livestock production, predators have been pursued and eradicated from their native landscape with a vengeance (Ferguson 1983). Predators are really just a "link in the chain," necessary for a landscape's ecologically interdependent function, critical elements of the public and private landscape too (Ferguson 1983: 132). With the increasing wolf population in Montana, Idaho, Wyoming, and across the Rocky Mountain West in recent years, the dynamics of predator-prey relationships have changed in a landscape increasingly facing the pressures of exurban development and habitat fragmentation across the "New West" (Maestas et al. 2002). The "Old West" mentality of "shoot, shovel, and shut-up" is in the process of evolvement and transformation to co-existence and adaptation in the "New West" (Maestas et al. 2002). The debate over wolves, for example, is and will continue to always be "about public values, not just economic

costs and benefits" (Nie 2003: 219). The question of whether or not to eradicate or live with predators is a question of social values (Nie 2003). Ultimately, living with keystone predators and predation are risks of the livestock business.

In her essay, "The Farmer as Conservationist," Catherine Badgley (2002: 206) discusses the growing importance of reconciling the goals of agriculture and wildlife conservation. She titled the essay from Aldo Leopold's ecological principles, which eloquently respect the values of working landscapes as well as preserved wilderness. Badgley's (2002: 206) essay discusses three themes: "the enduring and essential role of agricultural landscapes for maintaining native biodiversity; the role of farmers as conservationists; and the imperative that society, especially conservationists, support farmers." According to the Wild Farm Alliance, the adverse environmental impacts of farming and ranching can be minimized by "farming with the wild," which calls for the perpetuation of uninhibited ecosystem function on our "working landscapes," critical not only to species but to individuals and communities practicing rural livelihoods (Imhoff, et al. 2006: 85). Ranchers have traditionally been opposed to the reintroduction of predators like wolves and grizzly bears (Badgley 2002). Over 15 years ago, the return of the wolf to Yellowstone National Park and also the privately owned range subsequently occurred in the midst of the livestock industry facing challenges to maintaining economic viability (Muhly and Musiani 2009: 2439). Predators have long been eliminated through lethal means, but there is an expanding conversation about more ecologically and ethically informed interactions with predators (Badgley 2002). Approaches of using non-lethal methods to deter native predators from

livestock conflict are departures from the most common practices utilized by traditional ranchers. Actually, livestock production "may provide indirectly an important benefit for wolf conservation," as expanses of undeveloped private lands are buffers around public lands and habitat to wide-ranging wildlife species (Muhly and Musiani 2009: 2439). This is part of the "Old West" versus "New West" mentality. Maintaining working landscapes and promulgating biodiversity are interdependent goals of the farmer or rancher, for example, and the consumer buying commodities produced in the tradition of sustainable agriculture, products that are typically very high quality. In his essay "The Farmer as a Conservationist," Leopold stated, "The landscape of any farm is the owner's portrait of himself," where conservation "implies self-expression in that landscape, rather than blind compliance with economic dogma" (Callicott and Freyfogle: 1999). Leopold elaborates in "What is a Weed," illustrating the false premises that characterize public predator control:

> because too many cougars or wolves were incompatible with livestock, it was assumed that no wolves or cougars would be ideal for livestock…the scourge of deer and elk which followed their removal on many ranges has simply transformed the role of pest from carnivore to herbivore. Thus we forget that no species is inherently a pest and any species may become one.

Leopold (1949) famously elaborates upon the job of predators in trimming herds to proper sizes to fit the range in his essay "Thinking Like a Mountain," where he recounts mountainsides defoliated by over zealous deer populations in the face of wolf extirpation.

Conservation oriented farming methods are critical for long-term ecological function, a concession increasingly made by producers and appreciated by

consumers. According to farmer and writer Wendell Berry (2002: 239), "Industrialism is an economy before it is a culture," whereas agrarianism, or traditional family farming, is a two-pronged culture and economy of rural living. As stated by the U.S. Department of Agriculture, sustainable agriculture should "…over the long term, satisfy human needs, enhance environmental quality and natural resource base, make the most efficient use of nonrenewable resources and integrate natural biological processes, sustain economic viability and enhance quality of life," whereas Wendell Berry succinctly stated, "it does not deplete soils or people" (Leopold Center 2011). Recently, the intrinsic values of living with predators such as wolves, bears, coyotes, cougars, and more has gained recognition. The value of living with predators on the working landscape has gained recognition and made headway with those in the commodity marketplace through the preferences of consumers buying alternatives, with attributes like fresh, local, grass-fed and more. In her essay, Badgley singles out Predator Friendly Certification (PFC), at the time overseen by Keystone Conservation, a 501(c) 3 nonprofit in Bozeman, MT, as an eco-labeling effort that embraces and merges Badgley's (2002: 206) notions of "farmer as conservationist." Eco-labels are one tool in the toolbox of addressing perils of consumption devoid of knowledge through the complexities of consumer power in the marketplace. For instance, in this thesis, certification is illustrated by values-based certified labels such as organic, Forest Stewardship Certified (FSC), Marine Stewardship Certification (MSC), and Animal Welfare Approved (AWA). Theoretically, these eco-labels reward the producer for environmentally sound practices, by internalizing the environmental costs of production, which are often

externalized in the form of pollution, environmental degradation and loss of biodiversity. The environmental costs are internalized by establishing a price premium for ecologically sound and humane production practices. PFC embraces farming with the wild, as the focus is on non-lethal coexistence, certifying commodity producers who recognize and appreciate the presence of native carnivores on the landscape. Becky Weed, a longtime PFC certified Montana rancher, agues that the risk assumed in order to share space with charismatic wildlife is well worth it, saying:

> What makes the Northern Rockies region special is the presence of these extraordinary mammals and the habitat that sustains them. If I wanted to remove all risk from ranching, I would move to a cornfield in Illinois" (Badgley 2002: 209).

Valuing the keystone role of predators in regulating ecological functioning on a ranch or farm is an inherent part of conservation. The long-term hope of these types of labels is that as consumers become aware of ecologically and ethically sound production practices they will pay a premium for certified commodities.

Within the global food sector, certification and eco-labeling systems are expanding the most rapidly; niche-market coffee certification leads the way (Raynolds, et al. 2006). Labeling is a strategy employed within the larger framework of the alternative agro-food movement, which has the potential to create meaningful change. The alternative marketplace provides space for potentially transforming the dominant food system, by "challeng[ing] the forces seeking control of the system and the very structures of capital itself (Hassanein 2003: 85). In her article, "Toward a Theory of Value-Based Labeling," Barham (2002) argues that the rapidly growing phenomenon of value-based labeling has not been adequately studied; PFC

offers an opportunity to research and better understand the promise (benefits) and pitfalls (barriers) of a particular, grassroots eco-labeling endeavor. For sweeping change in the agro-food system to occur, Buttel (1997: 352) maintains that change is borne of agricultural sustainability initiatives; these initiatives are "are the most important social forces that could provide a countervailing tide to global integration of the agro-food system, to the decline of household forms of agricultural production and to structural blockages to achievement of sustainability" (Hassanein 2003: 80). Barham (2002: 358) further writes: "to the extent that values-based labeling can make a useful contribution to solving these problems, all actors involved will want to know how to evaluate the promise of particular labeling efforts and how to avoid the pitfalls."

Research Objectives

This thesis explores the promise and the barriers of the Predator Friendly Certification (PFC) eco-labeling scheme. PFC producers in the commodity marketplace recognize that there are no "one size fits all solutions" of wildlife co-existence, so they creatively practice numerous and durable non-lethal methods. PFC initially received attention in the press, with a 2000 article in *Time*, for example, and showed much promise, yet has expanded very slowly under Keystone Conservation. By studying the PFC certification program, this research provides insights into the growing phenomenon of eco-labeling as a strategy employed in the alternative foods movement to address process and quality (Barham 2002). The factors and barriers that keep the PFC label from fulfilling its' promise are also

evaluated. Using PFC as a case study, this research hopes to provide some new insights into the grassroots eco-labeling efforts. This research asked the question: *What factors have limited the fulfillment of PFC values and goals and what factors might affect the advancement of this eco-labeling effort, in some form, in the future?* Interviewing the founders of the Predator Friendly movement, PFC certified producers, and producers who inquired into certification but chose not to seek it fulfilled these goals and accomplished these research objectives. This project is limited somewhat in scope, due to the specificity of focus, so an additional project is necessary to understand the consumer standpoint.

Thesis Organization

Chapter 1 provides some historical background of values based eco-labeling, a theoretical understanding of eco-labels in the marketplace, and a short analysis of the promise and barriers found in four certification schemes: organic, Forest Stewardship Certified (FSC), Marine Stewardship Certified (MSC), and Animal Welfare Approved (AWA). These particular certification schemes are discussed because of direct and indirect relationships to PFC, in terms of grassroots program evolution and in the case of organic and AWA, overlapping attributes of certification. Chapter 2 discusses the history of the PFC eco-label through interviews with five of the original founders, the on the ground application of PFC practices, and describes the verification standards for certification. Chapter 3 discusses the data collection methods, the sample set, and limitations to the research. In Chapter 4, the analysis of PFC producer perspectives reveals the larger context of the application of

predator friendly practices on the ground along with the limitations of the eco-label in terms of goal achievement and its future advancement. In Chapter 5, the analysis of producers who inquired yet chose not to certify further reveals the barriers to PFC certification as well as the future trajectory of the eco-label. This chapter also discusses the application of predator friendly practices embedded within the larger framework of sustainable agriculture. Chapter 6 draws conclusions based upon the voices of these interviewed producers, draws lessons learned from PFC based upon comparison with other certification regimes, and situates the scope of the PFC eco-label in the context of its future trajectory towards the Certified Wildlife Friendly (CWF) eco-label. Finally, the Epilogue further discusses the future evolution of the grassroots PFC eco-label as it transitions to the better institutionally organized and financially funded CWF eco-label under the Wildlife Friendly Enterprise Network.

CHAPTER 1 – LITERATURE REVIEW
VALUES BASED ECO-LABELING CERTIFICATION

In order to create a context for the story of PFC, this chapter will discuss the theoretical background of values based eco-labels. Values-based labels are a manifestation of social resistance to the systemic ills of industrial agriculture, posing concerns and solutions rooted in "process and quality" of production (Barham 2002: 350). Under the theory of eco-labeling, standards are upheld and the true social and environmental cost of production is internalized in the final price of a commodity. It is not unfairly externalized in the form of social capital loss and environmental degradation. The imposed constraints on producers from certification labels are theoretically compensated in the establishment of the property right to utilize the label for the furtherance of increased market value for products (Gurthman 2007). Eco-labels offer a dual promise to address social and environmental justice manifested in a commodity (Guthman 2007: 458). A certified commodity embeds values by the seal of certification when educated and motivated consumers hold trust in the certification agent (Treves and Jones 2010). Eco-labeling works within the framework of capitalism to generate revenue reflective of production's true cost. Labeling schemes are voluntary; producers adhere to the labels standards due to moral commitment, economic incentive, or a combination of both reasons.

Addressing Process, Embracing Quality

The proliferation of eco-labeling in the past two decades signifies growing social, environmental, and animal welfare concerns on behalf of many producers and consumers. By accepting a price premium, consumers implicitly agree to pay

for something more than the tangible commodity. Consumers may demonstrate a preference for commodities that exhibit desired attributes while producers seek "a fast track route to improve practices, boost credibility, and increase sales" (Gulbrandsen 2005: 17). The benefits may not be seen directly by the consumer at the time of purchase, but trust in the integrity of certification is supposed to ensure the deliverance of values-based attributes. Consumer interest and demand for "natural" (minimal processing, having no artificial ingredients or color additions), "organic" (free range animals not given any antibiotics or growth hormones, produced by farmers emphasizing an overall state of harmony with the land and processed at a USDA inspected facility), grass-fed, and local (produced within a certain radius of one's foodshed) continues to grow, illustrated through a willingness to pay for these perceived internalized benefits (Thilmany et al. 2006). As economists say, 'there is no free lunch,' but various eco-labels seek to certify that lunch might be free of pesticides, synthetic growth hormones, and /or animal cruelty. With this general theoretical overview in mind, in the next section, the theories of Karl Polanyi will help explain eco-labeling on a deeper level.

Polanyi's Theory of Embeddedness

Economic behavior is "embedded and mediated by a complex, often extensive web of social relations" (Hinrichs 2000: 296). Markets are socially structured institutions, steeped in culture and meaning that sometimes recognize the inequities of food production. The idea of social embeddedness is rooted in the works of Karl Polanyi, who stated "the human economy… is embedded and

enmeshed in institutions economic and non-economic. The inclusion of this non-economic is vital" (Hinrichs 2000: 296). Polanyi believed that a social system based upon the unrestrained "free market," where land and labor are reduced to nothing but factors of production without an appreciation of the larger social context is inherently destructive and cannot be sustained for a considerable period of time (Barham 1997: 241). For example, embeddedness may become part of the "value-added" into a farmers' market commodity, as characteristics of the shopping experience, such as personally talking to the farmers and seeing photos of the actual pasture, are desired interactions.

In reaction to this loss of meaning in this excessive utilitarian view of reality, a "double movement" is born as societal groups begin to organize around the cause to restrain the expansion of unfettered industrialism (Barham 1997: 241). To citizens concerned about process and quality, the market is no longer a location of "quality" commodity exchange, but merely an idea co-opted by industrial efficiency and robbed of "process" as commodities devoid of meaning dominate the marketplace (Barham 2002: 350). According to the theory of Polanyi, citizens generate social protections as a natural response to inequities they perceive within the free market. Here, the true cost of production is all too frequently not borne by the consumer, as the market cannot be relied upon provide environmental justice. Regulations, laws, or social institutions that speak out against industrial paradigms are mechanisms utilized by grassroots citizens to address the inequities of the market. Thus, eco-labeled commodities "incorporate moral values at the same time that they help retain economic value" as they are an expression of accountability

that may be appreciated by values motivated consumers and contribute towards a more equitable society (Guthman 2007: 459)

A Situated Understanding of Eco-Labeling

The eco-labeling movement exists in something of a paradox. Efforts to counteract the fundamental flaws of unjust production and trade utilize the same market mechanisms that generate inequities. Working through the mainstream market, however, is an approach that continues to gain traction for using value-based labels as a way to counter the ills of industrial agriculture. This is seen in the proliferation of eco-labeled commodities garnering market share. Consumers supporting values-based labels instigate regulatory decisions about ecological and human health, working conditions, and remuneration (Guthman 2007). The moral responsibility of market choices is recognized by increasing numbers of consumers who seek to transform their purchasing choice from an individual action into "an act of social solidarity" (Barham 2002: 357). This sentiment is reflective of Polanyi's view that the illusion of disparate production and consumption removes the burden of responsibility from society, which is fundamentally dehumanizing (Guthman 2007: 458).

When consumer choices are motivated by moral values and not economic efficiencies, the market ceases to be driven by the economic ideal of "perfect competition among abstract sellers and perfect competition in the hands of abstract buyers," but instead as a market*place* with great significance and consequences behind the commodity (Barham 2002: 352). Networks linking producer and

consumer supporting values-based labels are "short supply chains" (Guthman 2007: 459). Moreover, the labels embed and link information for the consumer about both the process and quality of the commodity they are purchasing. Embeddedness is a term of description for economic behavior entrenched in social relations (Jaffee 2007). The concept of embeddedness is more than "friendly antithesis of the market," but a deeply layered evolving social relationship between producers and consumers, actually, a means of transformation (Jaffee 2007: 23). Tangibly, embeddedness is reflected in eco-labeled commodities for sale at farmers' markets or in local community supported agriculture operations because the intentional support of consumers generates economic revenue while building familiarity and trust between producer and consumer (Jaffee 2007).

Clashes for authenticity and accountability will continue in the world of eco-labeling. Very distinct interests and motives of participants in the system drive the future trajectory of eco-labeling. For example, to many grassroots activists, the integrity of all the seal of certification represents can be out at risk when a large corporation adopts the seal to gain a new market or a market advantage (Jaffee 2007). The task of standing firm to the original intent and values of an eco-labeling effort remains a challenge as these efforts grow from the grassroots level into the mainstream marketplace. The tension of staying true to the founding principles of a labeling effort as it scales outward to new horizons is a natural growing pain of marketplace expansion. When attributes such as "free of pesticides" or "devoid of animal suffering" are labeled separately rather than under organic certification, studies find that consumers are willing to pay more for such identified attributes

(Hustvedt el al. 2008). Fueled significantly by growth in the organic sector in food and animal fiber, over 52 million consumers in the U.S. identify themselves as part of a population segment of the economy interested in "lifestyles of health and sustainability" (Hustvedt et al. 2008). Hustevedt et al. surmise that "given the difficulties of organic production, animal fiber producers may be wise to tap into the "lifestyles of health and sustainability" consumer segment for other production attributes (2008). Such a claim bolsters the idea that consumers are not only interested in food commodities backed by a values-based label, but apparel too. This consumer population segment focused on sustainable, holistic living is the same consumer segment that the Wildlife Friendly Enterprise Network seeks to capitalize upon in generating marketplace support for their evolving label, Certified Wildlife Friendly (CWF), (what PFC is morphing into) discussed further at the end.

Theory to Practice: The Need for Certification

Values-based eco-labels are one tool towards correcting the ills of the industrial food system, by providing a price premium to producers who uphold the values implicit in the certification labeling (Treves and Jones 2010). As noted, the paradigm of certification presumes that consumers are willing to pay increased prices for producer practices of enhanced ecological or social integrity. Certification requires accountability of verification (3rd party is most desirable), through agents such as the USDA or an accountable private enterprise. At the core of certification lies knowledge that the certifier truly certifies the integrity of the standards. Concerned consumers need this knowledge because the modern industrial food

system creates a "distancing" of production and consumption, which makes marketplace choices blind (Eden 2011: 171). Eco-labels strive to solve this "distancing" problem in a variety of ways, but require a curious and/or educated consumer (Eden 2011: 174). Certification entails confirmation to specified standards, typically grounded in the basis of an audit achieved to a certain level that ensures accountability (Taylor 2004). The growing tension between certifications that "hold the bar and those that raise the bar on social and environmental conditions" will likely continue (Raynolds et al. 2006: 159). Producers themselves are 1st party certifiers, so certification is built solely upon trust between producer and consumer. Keystone Conservation, for example, is a 2nd party certifier of the Predator Friendly label, and theoretically could hold producers accountable with yearly farm/ranch audits, a higher application cost, and rigorous non-lethal co-existence verification; this has never happened. Keystone Conservation, for example, has faith that no unscrupulous producers certify and corrupt this eco-label built entirely on trust.

A 3rd party provides written quality assurance "that a product, process, or service confirms" to rigorous standards (Taylor 2004: 132). Thus, 3rd party certification provides greater objectivity and accountability through an independent certifier, and is the most trusted. NGO certifiers "have the greatest legitimacy, given their corporate independence and are growing the most rapidly" as the quest to verify compliance with process and quality bolsters the claims for social and environmental definitions and production (Raynolds et al. 2006: 149). Transparency, or clarity in the chain of generation, is a hallmark of 3rd party

verification. Governmental 3rd party verification is frequently used in organic certification while other niche marketed products increasingly rely upon NGO–based certification. This is a type of 3rd party certification that establishes independence from corporate and state interests, enhancing legitimacy (Raynolds et al. 2006: 150, 159). Until the adoption of a 3rd party certifier, like the USDA or credible private agent, the risk for loose standards or lack of annual accountability is significant. First and 2nd party verification lack the transparency inherently part of 3rd party verification, but weaker levels of certification are not always at risk for corruption. Much depends on the motivations of the players in the movement, as eloquently revealed in the PFC case study. As discussed in detail in the Epilogue, the future evolvement of the PFC eco-label is contingent upon the move to 3rd party certification for varied concerns. It is important to remember that this need for certification is rooted in the works of Polanyi, who sought meaningful connections between the process of commodity production and quality, where the identity is obvious and not cloaked by industrial efficiency.

Eco-labeling scholar Barham identifies the connection between Polanyi's recognition of the double movement of societal self-preservation and the materialization of agro-alternative social movements that embrace "re-localization of food production, consumption networks more closely tied to community-level institutions, environmental protection, and stewardship through farming" (Barham 1997: 241). She refers to the theories of Polanyi in her eco-labeling discussion, since he viewed land and labor as "fictitious commodities," ingredients treated as commodities, unfortunately, their whole identity of social implications fails to be

captured (Barham 1997: 240). Eco-labeling offers a "knowledge fix" to the problem of distancing, which exposes the effects (environmental and social, for example) of production, also known as "defetishizing" a commodity (Eden 2011: 171). Through purchasing certified commodities, consumers exert political force and may "unravel the magic of the commodity, rather than reveling in its seductive delights," perpetuated by fetishized goods, such as gold jewelry, for example, or a succulent corn fed steak from an industrial ranching operation devoid of knowledge of process and quality (Eden 2011: 171). There is an important connection between the blindness of distancing and the ignorance of the modern consumer purchasing based upon efficiency and price. The relationship between distancing and ignorance is parallel to the relationship of process and quality of production couched in sustainable agriculture. The means of production are implicit in the quality but the knowledge fix it provides is part of the process history.

Eco-labeling offers a "lifting" of the process and strip away the moral ambiguity. Herein lies the necessity of revealing the "hidden abode of production" to consumer scrutiny and knowledge in the marketplace, addressed through eco-labeling (Mutersbaugh 2005: 400). Eco-labeling may help a person decide and address his or her relationship to food or food related issues in one's community. Quality, local commodities increasingly garner consumer support from "food citizens," people eschewing passive roles of consumption and production and making meaningful choices based upon food democracy (Hassanein 2003: 79). Food democracy's core idea is that people have an imperative to actively participate in and renovate the food system fraught with the status quo of industrial

production. Regardless of eco-labeling certification, the players in sustainable agriculture initiatives steadfastly believe that small-scale, diversified sustainable farms, such as those represented in the PFC movement remain the catalysts for transformation in American agriculture (Jaffee 2007). PFC eco-labeling is a fascinating case study.

Meaningful Eco-Label Examples

With this background information in mind, the remainder of this chapter will discuss several examples of voluntary eco-labels. The purpose of these discussions is to shed light on the later analysis of PFC through producer interviews. By studying other eco-labels, which have been successful or had and limited success, lessons are learned that apply to the following case study of PFC and its future advancement under CWF. In sum, "labels tell consumers stories about what makes the commodities behind them important" and in a devolutionary way, "put regulatory control at the side of the cash register" (Guthman 2007: 472). The credence staked in an eco-label by consumers depends upon a desire to know the commodity. This requires an awakening.

Organic Certification

Once only a niche market, certified organic agriculture has grown, literally, out of grass-roots movements several decades ago to impressive market share in natural and conventional grocery stores alike. It has become a $30 billion industry, generating a price premium for each commodity (The Economist 2006: 73). Organic

agriculture emerged as an oppositional movement to the ills of industrial agriculture in the 1960s. "Grassroots, consumer-based confidence in and demand for safe foods that are produced and processed using environmentally sound, humane, and socially just practices," roots the organic movement, and the attributes should be pursued in dynamic form that preserves root integrity, state organic purists (Sligh 2002: 280). Organic began as a "real competitor to industrial food" (Sligh 2002: 277). It has resonated with the educated masses over the past two decades especially, and it has steadily gained market share as consumers voice a demand for food grown without synthetic pesticides, antibiotics, or hormones.

In terms of Polanyi's theory, organic certification offers the promise of revealing, or defetishizing, the commodity so our relations with nature are also a social interaction. Incentives to defetishize, such as certifying to uphold organic standards, resonate with producers and knowledgeable consumers alike. Disclosure, or process and quality, behind the commodity is a central principle of organic agriculture and an attribute desired by green consumers (Allen and Kovach 2000: 226). An anonymous marketplace alienates us from the true identity of the commodity born of nature and the associated people. Anti-capitalists concede that it is in the interest of green capitalists to fight from within the system, by utilizing market forces such as advertising, lobbying, and marketing for support of certified commodities (Allen and Kovach 2000). Revealing production methods is an incentive for green producers to distinguish themselves. Disappointingly, organic standards do not necessitate the disclosure of social dynamics invested in the

production of organic tomatoes, which may be picked by the hands of migrant labor paid as cheaply as possible.

The USDA oversees organic certification nationally through the accreditation of 3rd party verification agents, such as each state's Department of Agriculture. USDA allocated cost-share opportunities, of up to $750, or 75% of the cost of organic certification are helpful to small-scale newcomers to organic certification (Cost Share 2012). Also, the opportunity cost of becoming and remaining certified is an economic impediment for small-scale producers. The National Organic Program defines organic production practices as "maintaining or improving natural resources," with resources defined as "soil, water, wetlands, woodlands, and *wildlife,*" which Keystone Conservation referred to in a 2010 grant proposal for the benefit of PFC. Regrettably, the idea in organic labeling of co-existing with predators is all too frequently lost in translation with an emphasis on other certified attributes. This failing will hopefully some day be addressed. The truest intent of organic is an ecologically sound sustainable agriculture, where all facets and inputs of a landscape are taken into consideration. Currently, some organic producers are choosing to be predator friendly, but there is no accountability in requiring organic operations to seek co-existence with predators. This undermines the fullest intent of organic in its' commitment to sustainable agriculture. If organic ideals are interpreted and absorbed fully, these ideals include the realization that native predators are part of the organic burden to bear through management that solely promotes respect. Today's standards and practices for organic certification contain contradictions and inconsistencies, unable to capture the original idea of organic

agriculture, a grassroots holistic philosophy rooted in ecological values. Organic in its truest form asserts "a commitment to holism and ecological sensitivity," as agricultural commodities are devoid of pesticides, growth hormone, and synthetic chemicals while theoretically including the recognition of native predators (Allen and Kovach 2000: 224).

However, there are some disadvantages to certification success. Eco-labels can be co-opted into the industrial model they are ironically trying to oppose; the danger of co-optation grows as the movement expands. From its beginning as an alternative to "all of agriculture," to current mainstream integration, the organic movement now faces challenges as a result of its massive horizontal growth (Sligh 2002: 281). During the 1990s boom decade of organics, more and more of the large, industrial players moved into the organic certification realm for "the profits it promised rather than the values it embedded" (Jaffee 2007: 216). The power of the market veered the original intent of the organic movement slightly off course by "allowing any scale of farm to be certified organic" (Jaffee and Howard 2009: 4). For organic purists, it is distressing that organics have become a significant facet of monoculture, industrial scale marketing through "rapid industry consolidation," where big corporations have joined in and are buying out small producers (Jaffee and Howard 2009: 5). Also, technologically efficient farming is pursued by the big producers towards the maximization of profit, a way that is "anathema to the original organic idea" and threatens the grassroots integrity of organic production (Allen and Kovach 2000: 225). Such challenges are certainly not anticipated for PFC or in the future, CWF, but are helpful to understand to illustrate what happens when

a grassroots eco-label is co-opted. Considering whether organic agriculture can facilitate environmental sustainability within the market system, authors Allen and Kovach (2000) believe the organic movement is situated to continue making advances in holding society and the state more accountable to production processes. Singlehandedly, the organic movement cannot revolutionize the industrial food system but in conjunction with other related efforts, makes viable inroads.

Organic and Animal Welfare Approved (AWA) (discussed later as another eco-label gaining momentum and held by a number of certified organic producers) are two related eco-labels that provide a natural opportunity for collaboration. The powerful, durable consumer demand for agricultural commodities produced without plant pesticides and livestock antibiotics anchors the organic movement and is certainly related to animal husbandry practices. There are many small-scale producers and family farmers, however, holding up the original integrity of the organic movement, certified and non-certified. The schism between stakeholders who value the overall market expansion and those that feel the original values have been profoundly discounted will continue.

Forest Stewardship Certification (FSC)

Another relatively successful eco-label is Forest Stewardship Certification (FSC). FSC served as the model of inspiration for the fisheries eco-label that will be discussed in the next section. Instituted by environmental groups, forest certification emerged as a novel tool during the 1990s, in the wake of mass consumer mobilization against neo-tropical deforestation (Cashore et al. 2004).

Specifically, the failure of intergovernmental processes to address the environmental inequities of clear-cutting in the rainforest brought the idea of certification, instead of strict boycotting, to the forefront. Interestingly, a few of the original FSC founders worked as Peace Corp volunteers in South America in the 1980s and were able to successfully utilize entrenched relationships from previous community forestry projects to mobilize money towards positive, non-exploitative harvest projects (Bartley 2007).

In 1993, "governance without government" came to light as FSC established a set of standards to distinguish forest products meeting environmental standards of sustainability, thus furthering the global economic trade of wood (Eden 2011: 176). Around 1995, support for the FSC in the U.S. gained momentum, and in 1996, the FSC Council built region specific working groups to create certification standards governing sustainable management regionally, an ecological nod to place-specific forestry (Cashore et al. 2004). As an alternative to the tropical timber boycotts, FSC gained additional financial traction with the support of major U.S. foundations, players embedded within the movement as grant-makers expanding upon a organizational dynamics (Bartley 2007: 231). Bartley (2007) claims that the coordination of foundations and grassroots (at times radical) activists synergistically facilitated coherency among diverse ideologies and players in the movement. Various foundations acted to lend economic support to this uniquely private form of governance (as global governance was lackluster), explained by one foundation official:

> I think the logic of certification was very powerful, … shifts that were going on in the background were saying…we need to pay attention to the private

> sector --- we can no longer use these traditional regulatory approaches because they're not working anywhere….certification had tremendous promise – very exciting… (Bartley 2007: 243) .

Standard verification is carried out by 3rd party "independent certification bodies," accredited by the central FSC office (Eden 2011: 176). Symbolized by a "tick-tree" eco-label, the seal of FSC verifies a "chain of custody" standard stipulating that the certified product is not a non-certified commodity through this lens of traceability (Eden 2011: 177). FSC lumber at Home Depot, for example, is geared toward attracting a segment of green consumers and perhaps the seal of FSC educates the uninformed consumer. Working within existing capitalist systems, FSC leverages its power and gains traction towards pushing forestry and the wood products industry to more sustainable options.

Industry efforts countering FSC arose by the establishment of the Sustainable Forestry Initiative (SFI), a competing certification seen by FSC supporters as "a threat" to "(FSC) efforts to increase the stringency of rules governing sustainable forestry practices" (Cashore et al. 2004: 88). Trying to emerge as the dominant certification agent, the competing FSC and SFI each promulgated a climate of deep polarization between industrial forest companies and private smallholders (Cashore et al. 2004). Considering the reduction of public lands timber harvest during the past couple of decades, FSC emphasized bringing industrial and non-industrial private forest owners onboard with critical shares of timber (Cashore et al. 2004). Historically, FSC has floundered and failed to gain traction with independent smallholder forest owners, due to economic barriers in process such as high initial

certification costs. The challenge of gaining traction and acceptance by small producers is analogous to similar struggles discussed later in the context of PFC.

Wishing to help FSC gain traction in the marketplace, World Wildlife Fund stepped up efforts in the late 1990s to "institutionalize demand for FSC products," establishing a council to create a framework for identifying and supporting demand for FSC products (Cashore et al. 2004: 105). The economic support of foundations towards the furtherance of FSC is seen by some as a "channeling movement activity," of moderate goals while "allowing [movements] to consolidate their gains and protect themselves against attack" (Bartley 2007: 230). Market share was originally controlled by four companies, which is parallel to the meatpacking industry, where the industrial model pervades. Smaller retailers are "not the most concentrated part in the supply chain" and their market power is undermined by consolidation (Cashore et al. 2004: 94). In a 1999 coup for the FSC towards gaining credibility with the largest retailers, Home Depot announced it would support FSC (Cashore et al. 2004).

However, marketplace momentum developed slowly and some of the early claimed benefits of certification, such as price premiums, did not materialize and this fact still haunts efforts today. By the early 2000s FSC supporters started to work with this group of stakeholders to emphasize the attributes of certification garnering non-financial benefits, including "improved forest management and a green image" as a way to expand the eco-label (Cashore et al. 2004: 116). It seems the competing parallel industry label, SFI, evolved by learning from FSC frustrations while harnessing forces of certification and generating competition. This enhanced

the quest for legitimacy and transparency especially within the FSC (Cashore et al. 2004). FSC wood is marketed primarily through large retailers (big box stores) and they demonstrate "relatively little interest in increasing end-consumer demand for certified wood" with few exceptions. Incongruent with original expectations, "no consistent price premium has emerged for certified wood products" (Taylor 2004: 135). The "mainstreaming" of FSC wood is analogous to the sweeping marketplace integration of industrial scale organics, in regard to assimilation into the wider marketplace. Paradoxically, the high opportunity cost of displaying the "chain of custody certification" of the FSC logo may facilitate "leakage" of FSC products out of the certification system if sold to the unassuming consumer (Eden 2011: 177).

Philanthropic foundations and environmental activists forged tacit coordination through the processes of leveraging as the market for certified wood materialized over the past two decades (Bartley 2007). For example, FSC "institutionalized arguments against negative boycotts and depoliticized forest campaigns" as "channeling" occurred because as activists became embedded in this new organizational field, with particular standards, preferred tactics, and resource streams in the background (Bartley 2007: 246, 248). Bringing multiple stakeholders onboard is critical to expand market share of an eco-labeling effort, along with education and outreach, to harness enough consumer support. The ability of FSC to function as a working solution to globally stressed forests is a proposition still evolving. Clearly, FSC will not change the world alone but it does raise ideas about collaborative solutions and promotes transparency, serving as an inspiration for other eco-labeling schemes.

Marine Stewardship Certification (MSC)

Marine Stewardship Certification (MSC) is a wild-capture fisheries certification program inspired by FSC success in the late 1990s (Gulbrandsen 2009). MSC emerged in a parallel fashion to FSC's mobilization borne against neo-tropical deforestation. Historically, dolphin and turtle safe initiatives were borne of grassroots consumer concerns, which promoted the first dolphin-safe labeling scheme overseen by first an NGO and then in 1990, a parallel label created by the U.S. government (Gulbrandsen 2009). However, the focus on dolphins only took away from broader scale wild fishery conservation. Modeling MSC to a great extent after FSC, staff at the World Wide Fund for Nature (WWF) and Unilever partnered to fund the eco-labeling initiative, which quickly sought its own independent governance through an international Board of Trustees and foundational funding from private organizations, trusts, and charities (Gulbrandsen 2009).

For wild-capture fisheries, there is no alternative rival comprehensive label to MSC (Gulbrandsen 2009). To become certified MSC, a fishery must satisfy 3 core principles: 1.) show support of sustainable fish stocks; 2.) minimize impacts on surrounding ecosystems; and 3.) practice legally based management measures that maintain stock sustainability (Goyert et al. 2010). These attributes are 3rd party verified, annually audited, reassessed every 5 years, and in order to employ the eco-label on the commodity, a chain of custody audit (similar to FSC and the upcoming AWA eco-label) must be completed back to fishery of origin (Goyert et al. 2010). When the 5-year period is nearly up, the fishery is bound to a new major assessment for certificate renewal (Gulbrandsen 2009). Goyert el al. (2010: 1107) explain that

similar to challenges experienced within smallholders in FSC, being a small producer seeking MSC offers economic prohibitions, "ranging from $20,000 for small community-based fisheries to $300,000 for large industrial fisheries."

According to the MSC website, 23% of global shoppers recognized the MSC eco-label in 2010, up from 9% in 2008. In 2008, there were only 38 certified fisheries but by the end of 2011, 250 fisheries were in some stage of the assessment process, "landing nearly nine million tons of seafood" (Gulbrandsen 2009 and MSC Annual Report 2010/11: 1). In the midst of such progress, however, nearly 90% of global fisheries remain unengaged although a significant percentage may be operating sustainably yet not choosing to pursue certification while others are pillaging the ocean industrially style (MSC Annual Report 2010/11). Certification barriers to entry like cost, and time scale of assessment (it includes operational changes such as investments in new gear and reducing by catch of unintended species) preclude many of the smaller operators who have more of a stake in the community from entering the marketplace. Since fisheries are open-access resources, unlike forests whose trees are geographically rooted in place, most anglers around the globe share fish resources with many nations and have little control over quota setting (Gulbrandsen 2009).

Looking to the Maine lobster fishery, for example, which employs around 5,500 fisherman and peripherally supports livelihoods for marine outfitters, boat builders, and restaurants Goyert et al (2010) interviewed fisherman to determine if MSC would offer a price premium. Moreover, the researchers sought to determine if certification benefits would outweigh the costs. Interviewees commented on

expectations of certification (including 3rd party verification) while stressing the importance of encouraging local stakeholder dialogue about the fishery's certification process from the beginning to gain grassroots support (Goyert et al. 2010). Local practices such as employing herring bait exacerbate friction between the requirements within MSC and traditional practices in Maine (Goyert et al. 2010).

A Maine consumer survey revealed consumer preferences as less likely to "pay more for sustainably harvested seafood" than for "locally harvested seafood or if they knew that the premium went to support fisherman, coastal communities, or the ocean environment" so the emphasis is on local, community based harvest in Maine for economic impact (Goyert et al. 2010: 1108). The impact of MSC in this fishery would only be negligible in the face of such traditional support for local seafood, a market habit not likely to disappear. Clearly, a sensitive appreciation for local cultural values is necessary before a certification scheme with the best of intentions can sweep in, get producers onboard, and guarantee marketplace premiums based upon 3rd party verified certification. Consumer interest in locally produced food, driving local marine or agricultural economies, is also intimately linked to the welfare of animals from habitat to plate. Knowing that one's meal once roamed freely is increasingly important to consumers, and a driving force for price premiums in the marketplace.

Animal Welfare Approved (AWA)

The certification seal of Animal Welfare Approved (AWA), founded in 2006 as a "market based solution," entailing a producer price premium, recognizes family

farms raising their animals humanely in the outdoors, on pasture, or on the range (AWA Standards: 2012). This values-based label was born from the Animal Welfare Institute (AWI), a nonprofit historically committed to ending animal pain and suffering wrought by people. The eco-label AWA was spun off from AWI as an economically efficient way to challenge the status quo of industrial agriculture while promoting family farms raising animals with the highest welfare standards. AWA seeks to fundamentally "improve farm animal welfare." This certification program is 3rd party verified, so transparency is a hallmark. Producers are subject to the "most stringent" humane animal welfare standards according to the World Society for the Protection of Animals, as independent family farmers must raise all their animals of a particular species according to AWA standards, from birth to slaughter. This even includes guidelines for livestock guardian dogs, used as a tool in the framework of predator friendly operations. Compassion and respect are cited as key to the philosophy of the eco-label and to the producer pursuing such a goal (AWA Standards: 2012).

An AWA approved farmer may also apply for American Grass-fed Association certification (AGA), overseen by the AWI, which stipulates that ruminant animals free ranged and grazed pasture, were fed a lifetime diet of forage, were never treated with hormones or antibiotics, and were humanely slaughtered (AGA About Us: 2012). An approved AGA producer may put the certification seal on the commodity. The AGA is working with the USDA to establish a legal definition for "grass-fed" since currently many commodities have been and are still marketed as "grass-fed" when grass is merely part of their diet before a corn finishing (AGA

About Us: 2012). Consequently, AGA is seeking USDA specification for guidelines on grass-fed labeling with the goal of attaining an economic premium for products that meet their standards, where cattle, bison, goats, and sheep may certify (AGA About Us: 2012). Such an encouragement of partnership between eco-labels with many overlapping attributes is arguably furthering the sustainable agriculture movement through a building up of wider grassroots coalitions. Values motivated consumers who appreciate the organic definition inclusive of wildlife may be more likely to invest in commodities bearing the AWA label.

Lessons Learned from Eco-Labeling Examples

These four case studies discussed above offer lessons learned and cautionary tales to the future of the PFC movement to inform my conclusions in the final chapter. Four points stand out from the above exploration: 1.) 3rd party verification assures transparency in eco-labeling standard achievement and it is important for economic success; 2.) education and outreach are necessary for grassroots eco-labels to grow in the marketplace; 3.) financial support from foundations facilitates institutional expansion and consumer education; 4.) co-optation of the original values and principles is a risk of mainstream marketplace growth; and 5.) organic certification does not fully implement all of its values entailed in sustainable agriculture, such as predator friendly practices. Organic should be synonymous with predator friendly production if living up to its commitments to ecologically sustainable agriculture and holistic values.

Organic, FSC, MSC, and AWA rely on 3rd party standard verification, which imparts transparent legitimacy and facilitates price premium generation for the certified commodity. FSC and MSC have especially benefited from the financial backing of foundations. The transparency provided by 3rd party verification seems more inviting to foundation support than in house 2nd party verification. To make significant progress toward goals, these labels cannot isolate themselves from the conventional markets nor abandon alternative visions when large, corporate players get involved. The flourishing and expansion of certified eco-labels over the past two decades offers much to celebrate for the accrued gains in supply, demand, and accountability. Yet the market for organically, fairly traded, and sustainably produced goods remains a very small sector within the global marketplace (Eden 2011). Also, certification standards too frequently fail to capture the original ideals they strive to represent. To niche market purists, integration into the larger framework of the marketplace risks a weakening of the original integrity of the organic or similar eco-label, a proverbial watering down of alternative distinction by cooptation on a larger scale. A small scale certified organic family farm operates differently than a large scale certified organic industrial scale farm. There is a risk of progress on one level and undermining of alternative definition on another. For example, AWA is an expanding eco-label with clear goal definition and a solid track record of transparency; it is a logical ally in the future of the predator friendly movement, directly and indirectly. PFC niche marketing stands to face similar tensions as it transitions towards the (future 3rd party verified) eco-label CWF, still existing "in the marketplace while not quite of it," discussed in the Epilogue (Taylor

2004: 144). With this context in mind the next chapter will trace the history of PFC from its humble beginnings to the present.

CHAPTER 2
CONTESTED VALUES: RECOGNIZING THE ROLE OF PREDATORS

"The teaching mythology we grew up with in the American West is a pastoral story of agricultural ownership. The story begins with a vast innocent continent, natural and almost magically alive, capable of inspiring us to reverence and awe, and yet savage, a wilderness. A good rural people come from the East, and they take the land from its native inhabitants, and tame it for agricultural purposes, bringing civilization: a notion of how to live embodied in law. The story is as old as invading armies, and at heart is a racist, sexist, imperialist mythology of conquest: a rationale for violence --- against other people and against nature."
---William Kittredge, Owning it All

Predator Friendly Certification (PFC) History

PFC fits within a larger set of agro-alternative certification strategies that challenge the dominant industrial agriculture status quo through success in niche marketing. PFC recognizes stewardship of native wildlife on farms and ranches, from East to West coast, although the majority of certified producers are in the Rocky Mountain West. Producers must meet the challenge of familiarizing themselves with the habits of native wildlife coupled with "heightened vigilance and application of a mix of practices" to manage predators by non-lethal means (PF Co-Existence 2011). PFC is a program very much in evolution. It is a grass-roots eco-label born 20 years ago as a label for wool, dreamed up by a rancher and conservationist outside Bozeman, MT who sought a way to protect the charismatic integrity of the Montana landscape (Founder #1: 2011). Throughout this chapter, I quote members of the founder's circle I interviewed. It is important to note that their responses here are not considered part of the formal analysis, but inserted here to construct the historical background of PFC. Prior to official organization, the idea of Predator Friendly existed as an eclectic network of individuals ranging from wool producers to environmental activists working together for respectful on-the-

ground solutions to predator conflict, all on voluntary personal time (Founder #5: 2012). A founder recounted the ingenious way PFC was dreamt up, in the Big Timber, Montana grocery store over 20 years ago. He and another founder were shopping in the store and suddenly: "I remember looking at a can of dolphin safe certified tuna and my friend said what about Predator Friendly wool? And I said that is the most idiotic thing ever…but it was hatched" (Founder #5 2012). This interviewee was the only one to mention the inspiration for the PFC label as a can of certified tuna, a formative symbol in the novel eco-label's history.

The Predator Friendly Wool cooperative was assembled in 1991 in effort to "establish agrarians in green markets," promoted in part by the Corporation for the Northern Rockies (now the Western Sustainability Exchange or WSE) in Livingston, Montana (Grewell and Landry 2003). The foundational goal was garnering a price premium for PFC commodities, to reward producers financially for their commitment to preserving the integrity of the native landscape. At the inception of the PFC program the goal of the program, according to one of the founders, was to transfer, initiate, and give "the ability for people to see an alternative to an age old concept…how to balance the old west and new west" (Founder #2: 2011). The foundational players were simply motivated to seek peaceful solutions because they believed it was the right thing to do, morally, biologically, and hopefully, also economically. One of the founders (#5) reflected:

> The original goal was to identify a market for certified Predator Friendly wool and in the process get a premium that we never did identify percentage wise and take a risk and sign up these producers who were not trapping, poisoning, shooting. We did not know how many producers would sign up. The concept was to take a value added product to a niche market and attach a price premium.

Another member in the Founders circle reflected upon the goal of PFC as "giving people a way to say here is something we do," showcasing the values steering the course of operation, through a certified eco-label (Founder #3: 2012). The original intent was for the certification of wool produced amid a native, healthy population of predators to garner a higher market price. The producer going the extra mile to co-exist, using non-lethal methods would theoretically be rewarded financially for the risk and challenge involved, based upon the values of respect and personal agrarian ethics. In the western U.S., the landscape supporting a century old ranching operation, for example, is also of crucial value for wildlife habitat, migration corridors, and winter range, to a different degree than in other parts of the country. Ironically, one of the movement's founders was not able to seek certification himself, due to familial dynamics. Not supporting the certification label through his personal ranching operation, this Founder (#5) stated:

> …it was too controversial for my family. I was never PFC. We did all the ground stuff…fencing livestock off the rivers and not using chemicals and rotational grazing and livestock guardian dogs. Being certified just meant you formally signed a paper.

Unsurprisingly, reception to the lofty values and goals of the Predator Friendly movement was not well received by some local stakeholders. The PFC wool sweater designer initially regarded the venture with much promise before deciding that "Predator Friendly Wool" simply did not resonate with customers interested foremost in an attractive sweater or coat. She went on to say:

> I can say that when I tried to use PFC wool it ended up being expensive to the point that the added cost benefit was not…I could not get traction with my customers on that issue. To try and tell the story of PFC in my particular situation became too awkward. I based an entire collection on PFC wool and

> I did put those tags on and it did not make a damn bit of difference whether or not the coats would sell…the story resonates with a certain group of people. It is not a universal story…I think PFC is too obscure…I think there is a huge challenge in trying to make the PFC label equal to grass fed, organic, or AWA.

The Sundance Catalogue carried PFC wool sweaters and hats for a season. A Founder reflected, "I went down to an expo in L.A. I saw these PFC sweaters being modeled by waif thin women strutting out on the stage and I thought we really did it, got huge press, but nobody was working on it full time" (Founder #5 2012). The early days of PFC were "very heady and very intense times" with the hope of price premiums and market infiltration (Founder #5 2012).

The 5 members of the founder's circle interviewed are each unique individuals who sought to revolutionize the deeply embedded prejudices against predators. This mechanism of PFC made simple economic and moral sense to them. As one Founder (#2 2011) recounted,

> …so the way to frame it is the triple bottom line, to have an ecological, economic, and social benefit. I would argue that PFC was a great example of a triple bottom line, bringing returns to the woolgrowers, hoping to maintain and expand in the green market...they would be supporting whatever kind of conservation ethic they had…it did not take off as we thought.

The original Founders and certified producers were viewed as radical activists by those aligned by very traditional ways of operation. Ranching neighbors would vacate the room if they saw some of the players in the Founders circle enter. Still, the degree of negative reception is somewhat surprising. One member of the Founders circle who is still ranching today in the Livingston, MT area reflected:

> I was threatened with a death threat after selling my wool as Predator Friendly. Someone called me and said that I was responsible for the demise of the sheep industry, singlehandedly. Never figured out who it was…the idea of…not shooting a coyote was very threatening to a lot of people. The

> code of the West is that every coyote is a bad coyote and doesn't deserve to live… I was very naive in hindsight (#3 2011).

While their aims were high and ultimately PFC did not gain a lasting foothold in the marketplace, the general theme of their efforts facilitated a new dialogue against the "Old West" tide of pervasive ranching practices embracing lethal control for short-term benefit. The formative grassroots effort of PFC is recognized by all the founders as having changed the conversation, not dramatically but incrementally, itself a giant step to celebrate for these champions of sustainable farming and ranching in the "New West" (Founders 2011, 2012). From 1991 – 2004, the nonprofit focused on programs to mitigate the threats of human caused predator mortality through a wide variety of educational programs on the ground apart from PFC. Keystone Conservation is not the only player in the co-existence movement.

Interestingly, a parallel yet non-PFC associated effort to market "wolf friendly" beef occurred in 1998 in New Mexico from a ranch 50 miles northeast of Silver City, NM and illustrated the importance of a consumer education campaign to market this niche product (Aquino and Falk 2001). A natural foods store in Albuquerque took part in a month long market plausibility test in November 1998; the end of the study concluded that "Wolf-Friendly" beef's quality did not justify $3.75/lb price (Aquino and Falk 2001). Paradoxically, consumers were interested in a high-quality lean beef selling for $2.50/lb, but valuing the "wolf-friendly" beef from the social standpoint of wildlife co-existence yet not demonstrating a willingness to pay for the opportunity cost (Aquino and Falk 2001). Such a study speaks to consumer demand for a quality commodity first and foremost. The theme

of "quality" commodities, certified or not, is a central idea discussed at length in the analysis through the producer perspectives.

The Predator Friendly label was stewarded by the Predator Conservation Alliance from the mid-1990s until it changed its name in 2007 to Keystone Conservation, in effort to bring more ranchers and backcountry enthusiasts onboard as stakeholders. The non-profit underwent its' own form of re-branding and re-labeling. Keystone Conservation's mission is "to protect and restore native predators and their habitats in the Northern Rockies…to help people and wildlife coexist…to partner with rural communities to design strategies that save a place for America's keystone species" (Keystone Conservation website 2011). Keystone Conservation focuses on coexistence instead of management policies, addressing the Wildlife Services sanctioned killing of wolves predating upon livestock; instead, the emphasis is on proactive deterrence methods. Believing that the participation of all stakeholders is key (small scale backyard producers to ranches of several thousand acres), Keystone works to facilitate proactive work for coexistence as a norm and not a radical exception.

As will be discussed in the Analysis section, the commitment to sustainable agriculture, from backyard chicken operations to large scale ranching operations is a resonating theme that anchors the predator friendly movement, past and present. In the words of backyard chicken producer in the Northeast who is featured on Keystone Conservation's website (2012):

> We choose to be predator friendly for both ethical and ecological reasons. Peaceful coexistence with wild predators is humane and acknowledges that our land is their land, too. It is also essential to sustainable farming.

Conversation with myriad players in agriculture has evolved over the past 20 years, from a traditional shoot, shovel, and shut-up final conversation to a working dialogue of progress, a very significant gain itself.

Predator Friendly Certification Production Applications On the Ground

Certified PF producers "guarantee not to use or authorize any lethal control of native predators, showing that proactive coexistence practices are a viable option, provoking consumers to consider the impact of their food choices on wildlife" (Keystone Conservation Press Release 2011). The wool label enlarged to include other commodities such as beef, lamb, honey, and poultry during the late 1990s (Breuer 2011). On www.PredatorFriendly.org, a consumer will find a short list of some PFC farms and ranches marketing commodities like wool, beef, lamb, eggs, honey, and more.

PFC is copyrighted, bearing a paw print emblazoned label that is placed directly on commodities by some producers. As of spring 2011, to become certified, a producer must fill out a 4 page application describing his or her animal production operation, steps undertaken to reduce the vulnerability of predation, the wildlife background (including predator challenges), and the anticipation of Predator Friendly marketing. Each year of certification as Predator Friendly incurs a $40 fee to Keystone Conservation, returned with the signed PFC Affidavit, a contract built upon trust in upholding the seal of Predator Friendly practices. Compared to other eco-labels, the opportunity cost of certification is very little and all trust is placed in the morals of the certified producer. Unlike AWA, a closely related but 3rd party

verified eco-label, PFC does not specify that producers must be family farmers/ranchers or that animals must be pasture raised for their entire life cycle. According to Keystone Conservation, such practices that merit PFC certification include:

- Use of guardian animals including specific dog breeds historically used to patrol amid livestock in Europe (Great Pyrenees, Akbash, and Maremma) llamas, and donkeys
- Employing movable electric fences
- Rancher/farmer random patrols around the property (Range Riders)
- Co-grazing cattle and smaller livestock together
- Fladry (a European technique of hanging triangular flags to wave in the wind, especially effective for wolves)
- Scheduling pasture location based upon predation pressure
- Calving time management adjustment to diminish risk
- Symbiotic relationships between livestock and vegetable production
- Heightened vigilance for predator activity around crepuscular times of day

Predators seek the path of least resistance and may become comfortable with a farm's day-to-day routine, capitalizing upon calving and lambing opportunities when possible, especially if native prey like deer or elk is harder to access. Western and Midwestern producers face threats primarily from black bears, cougars, coyotes, wolves, and even feral dogs. Eastern producers face threats more commonly from coyotes, raptors, feral dogs, possums, and bobcats. Habitat fragmentation from development is another threat to wildlife habitat, and may upset the balance between rival packs of coyotes, for example. Coyotes have a very

keen sense of pack territory and rivalries; thus, livestock guardian dogs establish a barrier and engender tactics of respect.

Livestock guardian dogs (LGDs) are an incredible non-lethal management tool because they exhibit endless enthusiasm as "the ultimate disruptive stimulus tool," going so far as to cause predators and ungulates to modify their behavior (Gehring et al. 2010: 304). LGD use emerged centuries ago across central Europe and Asia to aid shepherds in protecting their goats and sheep from bears and wolves (Gehring et al. 2010). Historically, much knowledge of LGDs was lost with the eradication of many predators from the European landscape, mass migration of humans away from agricultural settings, and the collectivization of agriculture under communist regimes (Gehring et al. 2010). In fact, immigrants to the U.S. arrived devoid of LGD farming knowledge and application; LGDs were not resurrected in the U.S. before the 1970s (Gehring et al. 2010). The different breeds vary in effectiveness against predators, while the Great Pyrenees historically is the friendliest and most tolerant of threats. Aggressive LGDs, like Akbash, are typically more prone to defend livestock from cougars or wolves, but also risk human conflict on the wildland interface in recreation and tourist areas in the Rocky Mountain West, for example (Gehring et al. 2010). The economic cost benefit analysis of using LGDs is fascinating and should be explored further as a market opportunity by producers utilizing this predator friendly mechanism. This appreciation of LGDs is expanding in terms of their utilization and even breeding and later marketing by predator and wildlife friendly producers, certified and uncertified, across the

country (Gehring et al. 2010). Tangentially, raising LGDs to sell to others in the predator friendly network has the potential to generate additional revenue.

Evolution of PFC

The rigor of the PFC application process is menial as it is built entirely upon trust. According to Keystone Conservation, a 2nd party certifier, field audits at all certified farms and ranches have never been conducted, due to varied constraints of time and other resources. From approximately 2008 -2011, a period of transition within the nonprofit, commitment entailing PFC expansion was compromised due to an emphasis on other pursued programs, such as Bear Responsible Program, Range Riders, and Keystone Classroom (school education for children). Recruiting more producers for certification under Predator Friendly took less precedence in this period of limited financial resources (Breuer 2011). Ensuring the continuation of rural livelihoods is a broad underlying goal that remains unaltered. The Range Riders seek to pro-actively deter conflict with wolves using a variety of on the ground methodologies to keep both wolves and livestock safe and apart, for example, while education tools such as the Bear Aware program assists residents about wise food storage, garbage disposal, and instructs children and adults about wildlife behavior. During 2012, efforts to certify a greater number of producers are accelerating, as the PFC transitions to Certified Wildlife Friendly (CWF), discussed in the Epilogue. It is important to remember, however, that this research examined the progress of PFC over two decades through in-depth founder and producer

perspectives, snapshots in time that impart knowledge toward the movement's future.

As illustrated, PFC is a small, grassroots effort in eco-labeling still in the process of evolving; it formally morphed underneath a new framework, Certified Wildlife Friendly (CWF), overseen by the Wildlife Friendly Enterprise Network (WFEN), a 501(c) 3 nonprofit, during the midst of this thesis project, in November 2011. In November 2011, WFEN assumed all responsibility for PFC from financing to operation and management as the eco-label is integrated into the CWF program. The transition to CWF signifies a label geared more towards a price premium with all the entailed stricter certification accountability rather than solely relying upon values. The grassroots PFC movement that began as a wool label has come a long ways from the rangelands of Montana towards its current status, now organized with international aims and perhaps a 3rd party certified recognition of animal welfare too. In the succinct words of one of the PFC movement founders (#3), still ranching to this day yet not PFC:

> I feel like coyotes and predators in general are part of the ecosystem more than we are, and you want to manage around them and co-exist. You will inevitably have some losses, but that is just part of doing business.

The paradoxical opportunities and obstacles were revealed in the interviews and discussed in the Analysis chapters and Epilogue. The Epilogue of this thesis discusses the transition to CWF in detail and the ramifications for the future in regards to current PFC producers. Also, lessons learned about the future advancement of the PFC goals and values apply directly and indirectly to the furtherance of CWF as a successful enterprise.

CHAPTER 3
BACKGROUND INFORMATION AND METHODS

The Sample

This qualitative study was conducted over the course of spring, summer, and fall of 2011 through interviews. A few final clarifying conversations with interviewees occurred in January and February 2012. The names and contact information of PFC producers as well as those who inquired yet chose not to certify were confidentially shared with me by the non-profit Keystone Conservation, the PFC agent. I interviewed 17 PFC producers, 8 producers who inquired about PFC yet chose not to seek certification, and 5 of the founders and/or grassroots activists of the PFC movement. I was not able to reach 3 PFC producers for an interview and several of those who inquired yet chose not to seek certification declined the opportunity to interview. Four of the interviewees in the founders' circle were named by those within Keystone Conservation and the fifth was identified through snowball sampling. I sought contact with 9 more potential interviewees, producers who inquired yet chose not to seek PFC and a few PFC producers as well but was turned down by several. Also, I could not get in contact with 2 more people I learned about from snowball sampling in the founders circle. The majority of the key players among the founders circle contributed their perspectives as interviewees. However, the in-depth interviews I conducted afford a rich depiction of life as a producer farming/ranching in a way that respects the role of predators among a landscape, the challenges of and barriers to eco-label certification, and the underlying values of being predator friendly, certified or not. This sample size (17

PFC producers and 8 non certified but potential PFC producers) is definitely appropriate for determining the meaning and process attributed to the PFC efforts.

Data Collection

My overall approach to social research is interpretative, in that I seek to understand the meaning people place behind their actions and to build a good relationship with interviewees to truly understand their detailed perspectives. I utilized the in-depth interview as my means of data collection, "looking for patterns that emerge from the thick descriptions," seeking "deep information…rich qualitative data, from the perspective of selected individuals" (Hesse-Biber and Leavy 2006: 120). Interviews allow for face-to-face interaction (unless a phone interview), potential follow up, and greater potential to build a working relationship through trust. In comparison to other methods, such as observation, interviews are highly dependent on the honesty of interviewees (Marshall and Rossman 1999). Qualitative interviews produce text and words, a "quantity" of data from which "researchers try to extract meaning" by searching for themes implicit in the rich words and varied perspectives of the interviewees (Hesse-Biber and Leavy 2006: 11, 8). A qualitative design aims to establish deeper understanding and communication into research. It allows for an examination of grassroots efforts.

A semi-structured interview guide inquired into founder perspectives regarding the origins, values, goals, and future of PFC (see the Appendix). A different semi-structured interview guide inquired into certified producer perspectives about the structure, function, values, and goals attained through PFC.

Similarly, for producers who inquired yet did not seek certification, a similar semi-structured interview guide inquired into the values, goals, and barriers for not pursuing certification. The interview guides were based on the research question and included open-ended questions as well as probes and follow-up questions to encourage the participants to provide detailed responses and to enable me, the interviewer, to obtain clarification or additional information on relevant topics. The benefits to using a semi-structured guide include giving the interviewer the freedom to ask the purpose driven questions while simultaneously delving into new directions based upon new topics arising (Berg 2009).

I met with 3 members of the founder's circle in person for their interview and conducted the other 2 founder interviews by telephone. I traveled to 5 PFC farms/ranches in the Rocky Mountain West and Pacific Northwest in person, getting a full farm/ranch tour, conducting the interview, and seeing the PFC practices working for each particular operation either before or after the formal interview. The application of Predator Friendly practices truly came to life as we walked around each property and fed livestock guardian dogs amid sheep flocks, for example, or checked electric fences as part of rotational grazing schemes. Lastly, in the company of a Great Pyrenees guard dog on patrol, I explored a game trail frequented by black bears in search of honey from bee hives, and observed the dog checking to make sure the goats were safe too, in the Pacific Northwest. None of the participants objected to being recorded and all recordings came out clear and usable for analysis. Interviews ranged from 18 to 80 minutes with the average interview

lasting 43 minutes. Twenty interviews were conducted by telephone. All interviews were audio recorded on my computer and then I transcribed each one verbatim.

Data Analysis

The PFC producers and potential producers are treated as two distinct data sets and discussed in distinct analysis chapters. These two data sets were generated through similar yet different interview guides. I wrote a short memo after each interview, elucidating the flow and tension of the particular interview, a process that begins the approach of data analysis. The informal nature of the memo allowed me to note particular details about the interview and relevant asides.

As I transcribed and later coded the results, I heard the significance of the interviewee's meta-statements, described by Anderson and Jack (1991: 167) as "places in the interview where people spontaneously stop, look back, and comment about their own thoughts or something just said." Transcribing interview data into written text for analysis facilitates the technique of content analysis, "chiefly a coding operation and data interpreting process" (Berg 2009: 339). Berg (2009: 343) elaborates, "the analysis provides the researcher a means by which to learn about how subjects or the authors of textual materials view their social worlds and how these views fit into the larger frame…" A systematic way of analyzing the data is content analysis, "a careful, detailed, systematic examination and interpretation of a particular body of material in an effort to identify patterns, themes, biases and meanings" (Berg 2009: 338). Coding involves carefully reviewing each interview transcript for themes generated by the interviewees and overwhelming themes

from the literature. Coding identifies key themes, "segments" of the data as meaning is extracted from audio; patterns and concepts emerge from the existent data (Hesse-Biber and Leavy 2006: 349). The development of codes occurs from two approaches: top down (deductively from theory) and bottom up approaches (inductively sprouting up from the data) (Berg 2009). The coded categories emerged inductively and relevant themes were analyzed and examined for relevance regarding PFC goals, values, and barriers. As the analysis proceeded, I re-worked and reorganized the codes into more specific categories. The number of respondents to articulate a specific category was recorded from each of the interviews. Finally, the ultimate topics emerged from data and became the major pillars of discussion in the two chapters of analysis.

Quotes and Excerpts Selection

Quotations are a crucial part of representing participants' perspectives. In presenting quotations, verbatim language is stated; although awkward phrases (e.g. you know, ah,) have been eliminated for ease in reading. As routine, deletions are indicated with ellipses. Pseudonyms are used for the protection of privacy, although the majority of the interviewees stated without prompting that privacy concerns are not an issue; they are happy to be spreading the word of successfully farming with the wild, whether certified or not. I deleted the audio files at the end of the research process so that participant's voices cannot be identified.

Limitations

Although these methods provide rich, contextual details from in-depth interviews, this study has a few limitations. Additionally interviewing producers who were formally PFC in the past would widen the sample set to include another facet of knowledge towards the fulfillment of PFC goals and values in terms of how barriers manifested, too. Specifically, learning of the particular factors that motivated these producers to drop out of the PFC program would reveal additional factors that contribute to the advancement of the eco-label, whether PFC or CWF in the future. The 10 formerly certified producers that I know about from the confidential list provided by Keystone Conservation all certified in the mid 1990s – early 2000s, so some of their knowledge may have been lost over time. Furthermore, interviewing consumers who are stakeholders in the alternative foods movements, whether as supporters of AWA, organic, FSC, or MSC would contribute towards an understanding of PFC, a related values based eco-label, from the other side of the commodity. Such a widening of the research could easily become a separate project in the future.

Geographic limitations

Geography, in terms of farm and ranch locations, was a limitation in terms of me, the researcher, visiting the majority of the farms/ranches for in-person interviews and tours. The 5 farms and ranches I did visit in the Rocky Mountain West and Pacific Northwest are geographically situated so that outside of Alaska, they face the greatest threats from predation by charismatic megafauna, such as

bears, cougars, and wolves. Visiting an operation in the Midwest or South to see the on the ground comparison would be interesting, especially seeing the dynamics of threats from feral dogs. Due to time and budgetary constraints, I was limited in how far I could travel and so conducted phone interviews with the rest of the producers. I regret that I was not able to visit more of the agricultural operations in person, but where I did visit, I spent several hours walking the land and getting an understanding of each particular place. Geographic variation is an overall strength of the PFC movement, as certified and non-certified (under the radar) yet Predator Friendly practicing operations exist from California to Montana to Wisconsin to Massachusetts to Virginia. The grassroots network is wide and varied. The predator risks faced by different producers may vary considerably, so some producers face a steeper degree of challenge.

Founders' circle limitations

I interviewed 5 members of the founders' circle, an eclectic group including activists, ranchers, a clothing designer, and real estate broker. I interviewed 3 of the founders in person, with three trips to the greater Bozeman, MT area and one interview occurred in Missoula, MT. There are several more loosely affiliated members of the founders circle I learned about through snowball sampling, but I was unable to interview everyone. By my second founder interview, it became apparent that their perspectives would be quite helpful as a lens in understanding the history of the PFC movement and telling the story through each person's unique insight in the story. A couple of founders professed that their involvement with

Predator Friendly waned after the initial upstart or a few years into the certification program, and that over the years, significant details of initial goals and operation have been forgotten. Overall, I ascertained helpful knowledge from each one of the founders and succinctly wove the evolvement of the movement together. Each founder remembered the initial PFC movement a little differently; time steals memory. Also, due to the nature of the interviewees delving into great tangents throughout the formal interview, I decided that coding the results in a fashion parallel to the other data sets was not feasible. Instead, the founder perspectives weave together the narrative of the Predator Friendly movement and uniquely contribute vital knowledge reflections upon its successes and challenges. Next, delving into the heart of the research, I analyze the captivating perspectives from PFC producers in Chapter 4 and producers who inquired yet did not seek PFC in Chapter 5.

CHAPTER 4
ANALYSIS
PREDATOR FRIENDLY CERTIFIED (PFC) PRODUCER PERSPECTIVES

We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect. ---Aldo Leopold

Introduction

This chapter presents the findings of this research from the perspectives of PFC producers. From my original research question: *What factors have limited the fulfillment of PFC values and goals and what factors might affect the future advancement of this eco-labeling effort, in some form, in the future,?* I explored the motivations behind the ideology and practices of these producers. They intrinsically see their production techniques couched in sustainable agriculture, discussed as the first topic in this analysis. Five distinct topics from the qualitative interviews emerged 1.) a prior moral commitment to sustainable agriculture, 2.) support of PFC eco-labeling, 3.) education as a main PFC goal 4.) PFC limits, and 5.) the future advancement of the PFC movement. Underneath each of these topics are implicitly embedded themes, about limitations and the advancement of the eco-label that speak back to the original research question. Certification, or eco-labeling, itself has little bearing on their farm and ranch operations. Producers are intentionally pursuing farming with the wild as they seek co-existence with native predators because they believe it is philosophically the right thing to do.

The reward for co-existing with native predators is found in the ethical satisfaction from very high quality agricultural commodities and landscape conservation. The original goal of PFC was to provide an economic incentive

through a value-added product is not being attained. However, none of these producers are garnering a commodity price premium from bearing the seal of PFC. There is no economic benefit, then, to being a PFC producer at this time; this could change in the future. Nonetheless, it is a longstanding moral commitment to sustainable agriculture that seems to motivate the producers to participate in the PFC program. In other words, the producers' commitment to PFC seems to be rooted more in a philosophical commitment than a desire to get a price premium for their commodities. That said, the future expansion of PFC rests upon the certification agent, to a large extent, in terms of greater consumer education and outreach.

Prior Moral Commitment to Sustainable Agriculture

Of the 17 PFC producers interviewed, all 17 ardently expressed a longstanding dedication to sustainable agriculture, as defined broadly and inclusively by Patricia Allen and colleagues (1997: 37): "A sustainable agriculture is one that equitably balances concerns of environmental soundness, economic viability, and social justice among all sectors of society" (Hassanein 1999: 3). This includes accepting the challenge, risk, and uncertainty associated with farming and ranching respectfully. For the majority, their practices have always been predator friendly, but for others, a transition to non-lethal co-existence is part of their historical journey towards sustainability in general. Several producers undertook efforts in the past to sharply transition away from conventional practices, once they

were knowledgeable about alternative forms of production that use animal mechanisms to deter predators rather than lethal control.

Tom, a California rancher whose commodities also bear the seal of certified organic underwent a transformation in the late 1980s, from a conventional operation where in the past they utilized lethal methods of control:

> …in those days, you know, we saw coyotes and shot them but an awakening to diverse grazing practices where we became fascinated with the whole grassland ecology and native critters and so forth… and we essentially became organic, although at that time we weren't marketing our products as so forth. That was the process that started the process that started the switch in our philosophy to environment and so forth…we have become believers in the concept of biodiversity having benefits for its own sake.

Ryan, another California producer, who specializes in grass fed beef along with certified organic citrus, talked about the pivotal changes that have happened in the last decade. He reasoned that certification itself has not changed the farm, but the practices that make certification possible changed the farm tremendously:

> …We started taking the livestock and running them through the orchards in the summer time. The livestock need grass and shade. The orchards need fertilizer, we use the temporary electric fences and move though the orchards to accomplish our land management goals. The goats do the pruning, cut firebreaks, and the chickens aerate and fertilize. So doing that we use about 85% less fuel than we used to, and with the farm, we direct market everything…So being predator friendly is part of re-building the ecosystem and adding predators back into the cycle. Predators are a part and so important to keeping the system in balance and in check…Predator pressure keeps grazing density levels to where they are supposed to be and grasslands filter air and water and sequester carbon. A lot of people talk about types of grazing and they miss the fact that predators keep the herd together.

Ryan's rich explanation of predator friendly farming is particularly fascinating because of interplay between the livestock, orchards, chickens, coupled with the application of PFC practices including electric fences, livestock guardian

dogs, and rotational grazing in the orange grove. The soil health is incredible due to synergistic management and Ryan's desire to utilize the animals as tillers while providing fertilizer. Engrained in this allegiance is a "responsibility to keep the peace, keep the separation between animals that were here first and those that moved in on top of them….it is a philosophy I guess," reflected Julia, a bee keeper whose operation co-exists with black bears and mountain lions in the Cascade foothills of the Pacific Northwest. A small-scale chicken producer in Massachusetts reflected, "I think that being predator friendly when you're a producer is really the only sustainable way to go." An Idaho sheep rancher seeks "…to be able to live in harmony with those who were there long before I was." These producers appreciate the ecological keystone roles of predators. Husband and wife bison ranchers in Montana are interested in providing a sanctuary to all wildlife while generating a public appreciation of bison. As we took in the view from the Little Belt Mountain range at 7,000 ft, these ranchers stated:

> We never grain finish our bison; they are totally grass-fed; we are against those that do grain finish – it is not natural. Virtually, the entire Great Plains has been plowed up for corn and wheat. 90% of the corn grown in this country is for feedlots (our belief is that ungulates feeding on a variety of plants incorporate a variety of phytochemicals. E. Coli is a result from developing in an acid environment in the rumen and the acid is from being fed corn…

It is interesting how the interviews embed predator friendly production within sustainable agriculture at large and the appeal of exclusively pasturing. Equally fascinating is the subtle dialogue of challenging industrial agriculture through their methods of production. A Wisconsin farmer specializing in unique sheep milk cheese and grass fed organic lamb shared that over their 26 years in agriculture

their practices have brought soil health out of depletion from past conventional farming. Also, their interest in wildlife has precipitated significant gains including an addition of:

> about 200 acres and that includes a waterway that goes thorough the middle of the property and it acts as wildlife corridor towards two lakes and that was one of the attractions when getting this property.

An Oregon producer specializing in heritage duck breeds explained how quality food has a greater meaning towards her place in the world, saying:

> For me, food is the connection between earth and our being, the relationship between our body's physical needs and the earth that produces good, healthy food.

All these producers are intentionally making concerted efforts to farm with integrity. These producers are contributing to a better world as they see it, recognizing and appreciating the role of predators within an ecosystem. These attributes of the sustainable agriculture movement are further explained in the following sections after an explanation of the entailment of predator friendly practices.

Application of predator friendly practices

The methods producers employ to co-exist with predators range from running one or several livestock guardian dogs (10 producers), electric fencing (13), random patrols (16), guard llama (4), rotational grazing (13), movable enclosure for poultry (9), and lights (4). It is important to remember that all these producers were employing at least several of these methods on their own accord before PFC. In a few cases, producers learned about different, innovative techniques through

Keystone Conservation, yet the great majority of producers knew of and applied these practices extensively for the tangible and intangible benefits from their own research and development. Understanding the tangible intricate on the ground practices is a necessary part of appreciating all that predator friendly production entails. Furthermore, the interviews revealed the complex manifestation of predator friendly practices beyond the traditional uses in the pasture to application, such as the orange grove, for example, on one California ranch. Understanding the full utilization of predator friendly practices from the perspectives of certified producers is important for comparing and contrasting with non-certified yet practicing predator friendly producers, as analyzed in Chapter 5.

All ten producers employing livestock guardian dogs had at least one Great Pyrenees, although several employed Akbash and Maremmas, related breeds to Great Pyrenees. Understanding the gravity of the work accomplished by these dogs is difficult until seeing one in action. Visiting a farm in the Pacific Northwest, I observed Mojo, a young Great Pyrenees, at work as he patrolled amid the beehives. Julia, the beekeeper who co-exists with black bears, cougars, and coyotes commented:

> We've always run livestock guardian dogs…raised them. They prove effective. I'm a bee keeper running between 50-60 hives. Mo (livestock guardian dog) goes to work about two hours before sunset, by the ridge, to work all around the property, a patrol that gives him the sense of what is going on around him. Heavy duty work until about 10 PM at night, and then Mojo kicks back for awhile. He is not asleep. He stations himself by the barn or wherever…kicks in again before the sunrise, and that is when the predators are on the move.

The ways that guardian dogs complement other facets of production is amazing. Tom, the California rancher who transitioned the family's conventional ranching

practices to holistic, organic management in the late 1980s researched goat protection and decided to go with portable electric fences to complement the usage of dogs. Today, this ranch uses 12 Akbash guardian dogs, a Turkish cousin to the Italian Great Pyrenees. Consequently, Tom explained the how the presence of guardian dogs allowed even the orange grove to become predator friendly. He elucidated on introducing chickens to the orange grove in order to rotate them as natural aerators and fertilizers with portable electric netting while utilizing a guardian dog to patrol the periphery and protect the chickens from bobcats. Simply stated, "It's a package."

An Idaho sheep rancher employs electric fencing, guardian dogs, two llamas, and two herding dogs in addition to lights. She explained the particular allure of her dog Tara, "a Pyrenees cross with Alavari with strong instincts that I trust no matter what if I can see it or not. Her bark changes depending upon coyotes or wolves…A wolf pack could probably kill her but she would die trying." Ryan's California farm specializing in grass-fed beef, lamb, goat, and poultry utilizes guardian dogs for all species except the cattle. He poetically describes their favored practices and places the emphasis on rotational grazing, where pastures are constructed and deconstructed with portable fencing every few days. These management techniques are part of adaptive management strategies:

> We use electric fences to hold livestock in and keep predators out, and the dogs stay within the fences and the dogs try to create a presence and usually one dog will pinpoint a predator and keep a presence while the other tries to keep the herd together. The most important part, often missed in the PF literature is the rotation, the fact that we're moving livestock on a weekly basis...Predators have their natural prey available to them all the time and I often kind of compare it to a dance…We are never displacing the predators

> from space and time. We are just really doing a two-step with them, taking a little piece and giving it back…

After certifying a little over 4 years ago, this family farm learned how to address predation by the juvenile skunk population after den displacement in going after the chickens. Ryan elucidated on a phone call to Keystone Conservation where he learned about placing peanut butter on his electric fences to deter predation threats. On a nearly 300 acre certified organic family farm in Wisconsin, becoming PFC has not changed the mode of operation, but has improved several of their practices. Mary, the Oregon farmer specializing in heritage ducks explained how guardian dogs are a complementary aspect of their mission statement, proudly posted on their website, where they specify the need to reflect on the changes over the past 50 years to the food system and how supporting farms that take pride in animal care offer a positive departure to the status quo of industrialism. Clearly, this statement seeks to generate thought and promote an examination of paradigms. Furthermore, Mary reflected about the use of livestock guardian dogs, which she believes "are the most effective thing we employ…Dogs are just a normal and natural tool, a barrier."

In Chapter 5, the non-certified predator friendly producer perspectives speak about very similar practices. Many people are employing predator friendly techniques under the radar simply because they work and necessary to their goals of production. Utilizing predator friendly practices does not necessitate PFC.

PFC Certified Eco-Labeling Support: Why

All 17 producers expressed the ease of enrolling as a PFC producer because they were already doing the required practices on their own accord. Fourteen out of 17 stated that making a public statement about their farming practices involving wildlife coexistence is important. They elucidated that it is not the eco-label per se, but the practices upheld behind the label ardently supported. Formal certification was a natural extension of values already in practice. PFC lacks a stiff application process in comparison to other, well known eco-labels with 3rd party verification. Four producers are also certified Animal Welfare Approved (AWA) and 7 are certified organic, and both of these eco-labels do generate a commodity price premium, unlike the PFC eco-label as voiced by these producers. From the interviews, I learned that producers of initially high quality commodities are less likely to seek an eco-label describing the attributes of merit. They overwhelmingly viewed the PFC label as not an eco-label for display on their commodity but rather a symbolic overture to the practices and commitment of the predator friendly movement. Julia, the Washington state beekeeper said:

> It was important to show solidarity with people who were trying to raise livestock without um, hurting the animals…that demonstrates to our clients what sets us apart.

Julia is the only producer who identified PFC as distinguishing her commodity in the marketplace. First, she is producing a quality commodity sold in a farmer's market in Seattle. Her jars of honey include the text "Predator Friendly," but do not have the paw print seal generated by Keystone Conservation. In such an urban center like Seattle, it is not surprising that educated consumers inquire about "Predator

Friendly" appearing on the honey jar. The sole attribute of PFC is not generating a price premium for Julia, as foremost she produces a quality commodity with a reputation in the marketplace.

From the other interviews, I learned that the curiosity over what PFC entails is lost in translation by the other producers. For example, a Minnesota sheep farmer became certified, "just to make a point, a public statement that is what we support." Furthermore, she reflected:

> I have not attempted to market my fleeces that way, as PF… People are uninterested in that. So it is mostly to support Keystone Conservation and to make a statement that it is really not necessary to kill all these coyotes.

A Pennsylvania sheep farmer, Jenny, mused "certification does not matter as much to us as the fact that we're doing it as it is biologically the right thing to do." Additionally, she wanted to make it clear she is not found of eco-labels in general, saying "I think they are a lot of market and feel good. They help people gain and maintain customers; they don't mean a lot to me."

A husband and wife team that owns Montana Highland Cattle were drawn to certification because "it would be a cool thing." When interviewed as to how certification has altered the operation, the producers overwhelmingly said no, certification has not changed anything and customers care about the quality taste of the grass-fed beef and the health benefits. They proudly brought up the fact that "We were already doing this stuff before…being certified has not changed how we market our goods. This is not certified organic, but better quality meat than you could ever get in a grocery store. " Another Montana sheep rancher, Martha, one of the original members of the Predator Friendly Wool Cooperative, elaborated on the

symbolism behind eco-labels to stand for and counteract the injustices of conventional agriculture, stating:

> Actually, I'm less interested in eco-labels than changing mainstream agriculture. PF eco-labeling is a negative connotation. More than anything else, PFC is an educational program. It is successful in that term. The Big Boys of AG are no longer in it the way they once were.

Refraining similar sentiments towards generating consumer knowledge though eco-labeling, a poultry farmer in Oregon decided to certify as a way to officially support practices they embrace. This farmer simply explained: "I think it is something to educate people." A California farm specializing in grass-fed beef, lamb, and pastured chicken and eggs also AWA certified also found PFC a "good opportunity to educate." Education in itself does not generate a price premium, but is a necessary component for an eventual price premium. Furthermore, Ryan the farmer stated:

> Certification was not that important to me, honestly, I think it provided a little bit a validity to things that I don't think our customers understand…We are probably a pretty ecologically illiterate society on the grand scheme of things. It's not really driving extra sales.

An Alaskan producer who mainly faces threats from sled dogs, grizzly and brown bears, coyotes, and wolves supports not only PFC labeling but also Alaska Grown. She brought up the idea of symbolism and how it is nice to have a tangible means of illustrating what they are doing, even though PFC brings about no sort of price premium. Another Montana grass-fed, certified organic lamb producer, Jack, realized the merits of supporting PFC upon talking with a neighbor who is certified. Jack realized that he was already predator friendly, regardless of the certification.

> We were doing everything they needed, so it was easy. We want to support that line of thinking. Also, it is just smart. It works better than lethal predator control…Do we appreciate the marketing aspect, sure. Do we think

its going to make a big difference, no. We'd like to support the organization. Maybe a small handful (5 of 250 clients are interested in PFC).

These producers became PFC on their own accord and are utilizing the eco-label to show their support of the grassroots movement and educate consumers in the process. Thanks to the rich articulation of what PFC means to these producers, the on the ground application of these practices in detail are explored next.

Educational Goals of Becoming Predator Friendly Certified (PFC)

All 17 producers wholeheartedly agree that becoming PFC is taking a stand for conservation. Appreciating the role of predators and facilitating their continued existence seeks such a state of harmony, in a utilitarian sense of the word, where proactive measures of management lend to long-term solutions. Such measures were described in the previous section, and in comparison to short-term historic policies like "shoot, shovel, and shut-up" when dealing with predator conflict, non-lethal methods seek lasting solutions.

Nearly 80% of producers identified leading by example and its natural extension, "education," of the public as primary goals of certification. "Education" manifests itself directly through incorporating alternative agriculture practices on the ground as methods of co-existence and then indirectly as producers share incremental bits of knowledge with consumers who inquire or when the opportunity for education presents itself. These producers discussed their goals in terms of producing quality food that improves ecological systems in the long run and is respectful to wildlife of all sorts, out of personal conviction. Next, an

examination of how the goals of PFC producers align with their values, rooted in process (of agricultural production) and quality (of the commodity) speaks for itself.

Martha, one of the original members of the PFC Wool Cooperative explained that goal attainment always hinges upon a quality product, foremost. She emphasized her skepticism for eco-labels as she reflected over the twenty years of PFC:

> Originally, the theorizing about money from the label was part of it, but not in reality. When you have a good story, it gets you in the door. People express it in their consumer values. I am a bit skeptical about eco-labels. Commodity prices are so high that premium price is problematic…

Clearly, PFC is not driving price premiums alone, but PFC commodities may derive a premium based on other similar certifications such as organic or AWA. Tom's California family ranch that was conventional until the late 1980s finds PFC as a window for conversation when the customer takes notice. A customer must first be curious about certification for it as a sole attribute to matter in the marketplace as a price premium driver. Valuing the soil and educating the consumer about the profound necessity of stewardship from soil to table is an embedded facet of predator friendly production. Ryan's farm places the most ardent emphasis on rotational grazing, more than any other producers. In fact, besides the application of such practices on the farm, Ryan says "It is something I cover pretty extensively when I'm on the road, speaking two weekends a month…predators keep the herd together." Such a sharing of knowledge expands the grassroots network of predator friendly farming while building upon the power of sustainable agriculture in general to challenge the status quo of industrial agriculture. This is a critical piece of the

education puzzle sought to inform consumers, as Ryan explained how predators keep an ecological system "in balance and in check." He identified this as:

> So being PF is part of re-building this ecosystem and adding predators back into the cycle…So the transitions happened as the farm made a paradigm shift about a decade ago. PFC added a little weight to the program and helped to educate consumers.

A Wisconsin family farm protected under conservation easement became PFC "to educate people that it is a good way to do things" and "spreading the word that this is a reasonable way to live." Additionally, they are spreading grassroots knowledge about process and how farming with the wild generates a quality commodity, explained as:

> I think that as a society we have become so far removed from our food and farms that people think wildlife are not present on farms. They think it is only in the national forest or something. I think educating people is key.

A farm in northern Virginia specializing in heritage beef, poultry, and eggs is also certified organic, certified humane, and holds the seal of Virginia's Finest from the Department of Agriculture. Simply put, PFC "makes sense and let's the customer know our philosophy." The degree to which their goals have been attained is "not too much since the general population is not familiar with this certification, although it is a conversation starter." Ryan, the California family farmer whi especially embraces rotational grazing as a technique of being PF finds certification beneficial as a "tool," a mechanism to educate, pointing out:

> I think that again, it is an educational tool. It helps customers understand, and once they are willing to support it, they spend more dollars. But they have to understand first, before it translates from an economic standpoint.

When Mary, an Oregon famer, reflected about how she became aware of the PFC program, she is not entirely sure in retrospect, but finds that "as a conversation

piece, to further educate and inform the consumer," PFC seemed worthy of meeting the expectations. Educating others is a mission of being a PFC producer for nearly all; lack of public education is a current limitation of eco-label expansion and resonance in the marketplace. The Massachusetts egg producer is a self-labeled "hobby farmer" as agriculture is an aside, not her main income. She views the limits of PFC, such as lack of marketing punch, as a way to educate those in the wider chicken community about "the only sustainable way to go," sharing her methods with producers more conventionally aligned on internet forums:

> For me personally, I am doing it and I can afford to do it; it is not my main form of income and I see it more as a challenge….I am doing it on purpose as it is more of a mission for me to teach other people why it is important.

Ryan's family farm that believes that the future of the PFC program is rooted in education and is currently limited due to a lack of educational outreach. Besides consumer education as a goal of PFC, the idea of education is also a limit to a certain extent. He explained further that in the tradition of AWA, which provides literature and information for customers because it has the financial capability, PFC "has got to get more education out" to customers and farmers alike as "otherwise, it is just a feeling and it kind of up to the farmers." This moral support of PFC is not enough to make a difference in the marketplace due to the educational barriers.

The goals of all 17 producers are deeply rooted in their values. Simply, without a prior commitment to sustainability, these producers would never attain their goals in becoming certified, which include education, outreach, and leading by example. The values of leading by example in not using lethal predator control and operating in such dimensions for biological reasons are reported by 100% of

interviewees. Commitment to the PFC ideology, without any sort of marketing incentive, is a double-edged sword, standing both as a limit and a positive attribute to the future of PFC.

Limits to PFC:

Internal

Prior to an economic gain as experienced in the parallel eco-labels (certified organic or AWA), from commodity sales, a massive scaling up of customer demand specific to the PFC values-based label is necessary. Education, including outreach, builds an appreciation for predator friendly practices out of awareness and through food citizenship, when people take responsibility for their own values and food ethics. A Wisconsin producer worries about the potential of trust abuse. Since the program's inception, Keystone has relied upon producers seeking certification to utilize the honor system, as "A label of PFC means there are alternative things going on. I'm sure there could be some people who are PFC but could abuse it (like a feedlot operation)." From my observations and conversations throughout the research process, this does not appear to be happening in the slightest, but it is a viable concern generated due to lack of 3rd party verification. A Minnesota sheep producer explained in a sad voice:

> We have been committed a long time. PFC does not play into how we market our commodities. Never get questions from consumers. From Keystone Conservation I've had nobody contact me, and I'm fine with that.

The Idaho sheep producer who is also AWA compared it with PFC, pointing out management distinctions of accountability, saying:

> I think the stronger movement is AWA. I don't know what funding is like for Keystone Conservation and I think probably they need to broaden in the states, particularly in the West. I think they need to make themselves more visible. They need to get out and see these people doing these methods. AWA visits 2 times a year. They are accountable.

An Oregon farm that would likely qualify for USDA Organic certification (if they took the time to fill out the paperwork and invest the initial cost) finds that the perceptions of people are sometimes based upon erroneous assumptions. Such false assumptions are rooted in lack of education. Furthermore, the farmer stated, "I think a lot of people assume that if you are certified organic, you are automatically predator friendly. People don't know that it is not part of the requirement for organic." A bison operation in the Little Belt mountain rage in Montana explained that as a mom and pop style operation operating jointly to produce the highest quality meat and a Bison Quest Education guest program, the limits to PFC and parallel certifications lie in economic hardship found in the opportunity cost of certification as they face multiple opportunities to pay and/or contribute to agriculture related non-profits. This husband and wife ranching team identified this as a hardship:

> as struggling ranchers, producers can't pay everybody…I believe in the program, but again, we don't need it. People buy our bison whether we are certified or not, and I can't keep in buffalo.

These producers are self-starters and seeking out the program, but for true economic success of the PFC eco-label, demand from customers should be the driving force behind it. In the future, will customers seek out PFC (CWF in the future) commodities, based upon predator friendly attributes alone or will the ideals of the PFC label better be promoted as embedded in other similar eco-labels?

Will consumer outreach and education make the difference? This question is currently being grappled with in the transition to CWF.

There are distinct impediments and parallels to PFC when compared to other eco-labels, such as those discussed in Chapter 1. The burden of proof clearly rests upon the commitment of both certified producer and enlightened consumer to care for the upholding of certification standards, this research revealed. Sometimes it is a struggle to exist at PFC when neighbors are killing predators and upsetting local predatory pack dynamics. Producers hold themselves accountable; there are no yearly check-ins by the certification agent or surprise farm visits, events which may happen with AWA or a similar 3rd party verified certification. Thirty-five percent of producers cite the lack of institutional organization by the certification agent, Keystone Conservation, as a significant limit. Producers cited these institutional impediments as the lack of farm/ranch auditing, the fact that an operation may certify built on trust in the application alone, and the lack out outreach by Keystone in seeking new certified producers. As a cash-strapped non-profit focusing on other programs simultaneously, these barriers are not all that surprising. The future organizational aspects of PFC efforts under the eco-label CWF are discussed in detail.

External

Sometimes, using non-lethal techniques is a real struggle when facing threats not from wildlife, but from domestic terrorists, feral dogs. A northern Wisconsin family farm that specializes in sheep cheeses faces ongoing predator and livestock

conflict this year, which they attribute in part to the lethal actions of neighbors. This farm is also the only predator friendly farm around for miles, and thus, their methods of production are a limitation when faced with the actions of neighbors who are not particularly friendly with predators. They reflected in frustration:

> Domestic dogs are the worst predators; they don't respond to guardian dog messages…They have no fear of people and just go on a killing rampage. It is the hardest thing for livestock guardian dogs to learn how to do this, to deal with such threats.

Do consumers have any idea about the threats small farmers face from feral dogs? Additionally, the actions of neighbors may cause ripple effects in terms of upsetting a precarious balance of predator dynamics:

> We have a very tenacious group of coyotes that had been our resident pack. They were accustomed to our livestock and left our alone. There was coyote hunting that happened last year on a neighbor's property and I got upset about that…someone came by to show me, and it looked like the alpha bitch of the pack. And all of a sudden, we started having all these problems, and this hasn't happened in 20 years. We are running 7 guard dogs and we've had some attacks this year as well on sheep. We have Icelandics (sheep) we have lost two. I think the dogs do a very good job; I think the hunt threw off the balance. If you get an alpha bitch coyote who understands your dynamics, they will keep out other coyotes from their territory.

Coyotes are a common predator from west to east coast. All too frequently, they are persecuted though lethal control with a lack of understanding for long term pack dynamics. Besides this producer, one of the founders mentioned how lethal measures taken against a local, established coyote pack do not solve any real predation problems but rather upset the pack dynamics of hierarchy and competition long into the future.[i] This is a great opportunity for education.

Today's limits to PFC have an impact in the future trajectory of the eco-label as it transitions to CWF and has the opportunity to emerge as a different kind of

force in alternative agriculture. The real legacy of the predator friendly movement is not the label itself, but the actions and symbolism on the ground. These sentiments are forcefully stated by a Montana PFC sheep producer, Martha, who is one of the original players in this certification movement:

> PFC is really a microcosm of what is happening in agriculture. I have a deep seated conviction that agriculture has to work in the context of natural processes of the earth --- if not, we are all screwed. If industrial agriculture continues, we are going to suffer the consequences of a major collapse. Looking forward, what is the best way to affect the future of PFC? It is becoming more complicated, with implications going toward niche market labeling in animal welfare…

Martha fortuitously identifies the increasingly connections with animal welfare concerns and how they are gaining a stronghold in eco-labeling. Also, she identified the changing practices of management in mainstream agriculture, specifying "conventional producers are using non-lethal techniques and it has changed the dialogue in the West. A hell of a lot of ranchers are doing proactive things." In the midst of institutional certification limits, the deeply rooted personal convictions of being a predator friendly producer are not stifled. Instead, these producers really focus on the techniques that set them apart from the dominant agricultural practices. Incrementally, these producers are making viable contributions, they believe, towards a more sustainable world. The main limitation is a lack of consumer knowledge about the benefit to predator friendly production process and this is rooted in lack of education.

The Future Advancement of PFC

As reflected in the previous topics, producers overwhelmingly believe the expansion of PFC through institutional outreach and consumer education will give the eco-label more validity in the marketplace. The plausible possibility of partnering with AWA emerged as a factor toward future advancement. The nonprofit overseeing the eco-label should engender expansion, through strategic marketing including education and accountability. While all 17 producers are PFC for philosophical and ethical reasons, nearly 50% believe that PFC and the subsequent transition to CWF will gain future support out of pure necessity in a world facing environmental crises.

As they elucidate below, the on the ground methods of being predator friendly, embedded within the larger framework of sustainable agriculture, will only gain in plausibility and receptivity in the future. The term "predator" continues to instill negative connotations across a wide swath of society, so changing the eco-label to "wildlife friendly" speaks of an image more inclusive to animals and humans alike. A Pennsylvania sheep producer thinks that in the next decade this movement as a whole will "become more important as farmland or ranchland is threatened. Land will be challenged." Omnipresent in the background is the awareness of predator friendly as embedded within sustainable agriculture, addressing the challenges of industrial agriculture head on from the bottom up.

Again, education is a key re-occurring theme as a goal and as a necessary facet of the future of values based eco-labels. In and out of the marketplace, to gain traction on philosophical grounds and towards price premiums as well, education of

the producer and consumer alike is necessary. Word of mouth education about techniques that engender predator friendly production is galvanizing diverse producers to incorporate these practices, simply because they work and not to uphold predator friendly values. This Oregon farmer elaborated on her travels around the countryside and how increasing awareness of livestock guardian dogs illustrates the awakening people are having to usage of these dogs as part of guardian animal utilization for economic and environmental sense, spreading through producer networks, a kind of under the radar education approach. The potential to capitalize upon livestock guardian mechanisms, like dogs, is a promising future tangent of the predator friendly movement. The future will be interesting. Tom, The California family famer who is nearly 70 and has personally overseen the transformation of his farm from conventional to now certified organic reflected:

> But I think this whole dependence on killing and controlling…it is like we are fascinated with the idea of controlling nature rather than living with nature…We can promote being predator friendly and sustainability on philosophical grounds and will have support, but over time it will come just out of necessity. The huge challenge is changing agribusiness…It is easy to talk about a little 500 acre farm like ours…compared to the huge food production system…

Montana certified organic sheep ranchers believe that when they end the building of their ranch they will have made "a big impact on the relationship between wildlife friendly practices and sustainable ranching…Predator friendly practices will become more important. It is important to protect the wolves and the grizzlies." This operation is geographically situated in a highly traveled wildlife corridor, at the base of a mountain range frequented by three known coyote packs.

Regarding the CWF label as a seal to place upon commodities, one of the Montana organic sheep ranchers said:

> …from little I know, I don't think the elephant would help us at all in the American West…if the label stays with the elephant and ibis, we would choose not to use it. A wolf or coyote or mountain lion or something…The identification of an urban clientele speaks.

In regards to Certified Wildlife Friendly labeling Tom stated, "I think it would be far more understandable for a wider range of people than the predator issue. It is easier to talk about. It is definitely a broader concept that is more useful. " Again, the necessity of marketing and profit generation is directly salient towards the future expansion of this eco-label. The identification of the urban clientele as a market force speaks of the power of an educated populace having a greater willingness to pay for such commodities. The Pennsylvania sheep producer simply stated, "I think CWF is more of a positive term." Broadening the base of support, locally and internationally, is a potential benefit of CWF. The AWA approved Idaho sheep producer stated, "I think CWF is a wonderful idea. I think they need to get it our there. I would be very interested in staying with them and staying under the umbrella."

Just over 50% of producers don't feel so enthusiastic about the transfer to CWF, which pointedly alters the original intent of PFC. Ryan commented on the idea that PFC should "not be abandoned" based on the aspect of "predator" in the certification title. He specifically identified the "educational piece" that needs to be shared from the predator association and how "wildlife friendly" is a different term completely. An Oregon farmer prefers the PFC eco-label when compared to CWF.

He stipulated that CWF "sort of dilutes the message a bit," as it emphasizes a different kind of co-existence.

The salience of the predator friendly movement as a whole is based upon positive changes happening at the grassroots level, rooted in a commitment to sustainable agriculture. Regardless of various eco-label certification, these producers are committed to producing commodities honoring all facets of ecology, bearing the burden of risk inherently part of agricultural production. Their commodities have not achieved a price premium for PFC, but generate a market by virtue of quality. The majority of producers see "consumer education" as the fundamental goal and value of PFC, a necessary ingredient for expansion. In Chapter 5, the perspectives of uncertified producers, who inquired about PFC yet decided not to pursue it are explored. Their unique insight into the values, factors limiting goal fulfillment, and PFC advancement in the future marketplace complement the perspectives of PFC producers.

CHAPTER 5
ANALYSIS
POTENTIAL PREDATOR FRIENDLY CERTIFIED (PFC) PRODUCER PERSPECTIVES

"Healthy land is the only permanently profitable land." ---Aldo Leopold

Of the 8 producers interviewed out of 17 who inquired yet did not seek PFC certification, five topics emerged: 1.) A prior commitment to sustainable agriculture and the application of predator friendly practices; 2.) A lack of necessity for eco-labeling certification; 3.) Barriers of PFC; 4.) Ecological values of predator friendly practices, and lastly; 5.) Marketplace expansion potential. The first topic is identical to the first topic listed in Chapter 4, from certified producer perspectives. Fascinating themes are embedded within these topics. These producers employ predator friendly practices largely to the same extent and for the same reasons as certified producers but see no reason to formally seek PFC to bear the eco-label. However, there are significant geographical differences that provide for additional insights for this case study of PFC through the eyes of these producers.

Prior Commitment to Sustainable Agriculture

These farmers and ranchers have a longstanding dedication to sustainable agriculture built upon ecological and philosophical grounds. This commitment is unyielding and manifested in their production regimes. Three producers talked generally about the theme of self-satisfaction, as one elucidates "finding chefs or customers who would honor my animals…you have to value what you do as being principled" when selling commodities. Tennessee AWA and certified organic farmers are interested "in preserving birds and other wildlife. This includes a

Forest Stewardship Program here on the farm and a general conservation program, like fencing animals out of the stream." Predator friendly farming is a natural fit. Similar sentiments are expressed most eloquently by Katherine and James, family farmers in Ohio, who looked into PFC in 2007. Their allegiance to farming sustainably is a family operation that embraces consumption networks tied to the local community and facilitating positive externality farming. Clearly, they are two farmers consciously interwoven in their local community, as they reflected:

> We are just a very small family farm. We raise goats, chickens, heritage hogs, and we have a couple of horses and vegetables too…We try to farm in a way that keeps the soil and water healthy and we try to make space for everybody…We use GMO free seed, and could we buy cheaper feed, absolutely, but we buy all our feed locally and try to drive as much money as possible back to our local economy and other farmers who are doing things like we are. And everybody says you have to answer to the bottom line, but it is about lifestyle and what we do and think is important.

It is really interesting how producers make the connection not only between predator friendly production and sustainable agriculture at large, but also pride in the local community. Supporting local, independent businesses is economically beneficial to preserving the character of rural America. Peggy, a grass-fed goose farmer in Missouri reflected: "I've been farming 5 years and I've known that consumers are divorced from food…. and…Supporting the predators just makes for a healthy ecosystem overall." Peggy clearly sees the gravity of predator friendly production in the larger picture of connecting people to quality food. The process of growing quality food depends upon taking nothing for granted. Bob, a Virginia farmer specializing in grass-fed beef advertises on his website his philosophy of cattle which includes a respectful treatment of life. After talking about his intrinsic commitment to farming holistically, he ultimately found the meaning of PFC "so

vague," not clearly articulated by anyone from Keystone Conservation. However, he certainly supports the efforts of the movement. I can reasonably speculate that he would be a good candidate for the AWA or American Grass-fed Association eco-label should he wish to pursue either one. Already producing quality commodities for entrenched consumers bases, he does not need an eco-label even though he could qualify. Next, the on the ground predator friendly practices are explored and compared with PFC operations.

Application of predator friendly practices

Similar to certified producers, the usage of predator friendly practices is very pervasive on the ground. In some cases, the depth or scale of use is to a lesser extent than certified producers. Fifty percent of these uncertified producers are either using livestock guardian dogs or electric fences and one is using a guardian donkey and one a llama. Furthermore, some of the farmers and ranchers are geographically situated where they face predation issues by only 1 or 2 animals or they simply utilize one application of the predator friendly practices. Of the PFC producers, 9 out of 17 interviewed are situated in the Rocky Mountain West, where predation by charismatically big species is historically more pervasive. Of the potential PFC producers interviewed, 2 are in California, 2 in Virginia, 1 in Pennsylvania, 1 in Wisconsin, 1 in Missouri, and 1 in Tennessee. The identification of feral dogs as a grave threat emerged from this group. This threat is voiced as a concern among PFC producers too, although they typically face greater threats from more traditional wild predators. An Ohio farm specializing in heritage animals and

vegetables protected by livestock guardian dogs and a llama reflected upon predation by feral domestic dogs. Specifically, these dogs cause problems differently from coyotes, which livestock guardian dogs can deal with well; however, feral dogs are an entirely different sort of threat dynamic. Feral dogs appear to be an increasing problem across the Southeast and Midwest, gauging by the responses I heard from certain producers. Bob, in Virginia, utilizes "a neutered male donkey who will chase off hunting dogs and coyotes if they get into the fields." For other producers, nothing beats the integrity of a livestock guardian dog. Lucy, A Pennsylvania farmer facing predation threats from raccoons stated, "We have 7 livestock guardian dogs and they do one hell of a job towards scaring the predators away." The Tennessee family farm utilizes dogs, elaborating on the benefits to their Great Pyrenees who work together in a pack to mitigate feral dogs threats.

The unschooled consumer might view these producers as undeserving of PFC, as these operations typically face predation threats from predators not as charismatic as those in the Rocky Mountain West, such as wolves or bears. Certification of these producers could theoretically weaken the integrity of the PFC label, which started in Montana, some may argue, especially under the "Predator Friendly" connotation. However, coyotes, bobcats, and raptors are pervasive across the country, from the Midwest to the Southeast. The transition to Certified Wildlife Friendly (CWF) recognizes a wider cast of characters upon the stage of production. An interesting postscript to this research would entail a follow up with these producers in 5 years to see if they do seek certification under CWF, and if so, the

nature of that success. Based upon current eco-labeling utilization, it is difficult to make such a prediction.

PFC Eco-Labeling: Not Perceived as Beneficial

Of these 8 producers who chose not to seek PFC, 1 is certified organic (1 is both AWA and organic), 2 are AWA, and 1 is AGA, so several different eco-labels are represented among these 8 producers. These certifications help in the marketing aspects of the particular commodities produced by these farmers and ranchers ranging from beef to geese, generating a value-added price premium. These 3rd party verified eco-labels are furthering the producer values in and out of the marketplace. The prevalence of an educated consumer base, such as metropolitan areas is helpful. Harkening back to PFC producers, a quality commodity first and foremost drives the success of the enterprise. In the rural areas where farming and ranching are the predominant ways of life, there remain many misconceptions and prejudices against certified eco-labeling. Such a mindset is a barrier that may be broken through by "education," and is discussed at length later. An eco-label stipulating predator friendly is viewed as more of a hindrance than help.

The Tennessee family farm that is AWA and organic certified sells to an organic market in Knoxville as well as to local, rural customers at the Farmers Market. Selling to educated consumers in an urban setting is a much easier market, as it is easier to identify a concentrated populace of people who care for farming with the wild. Referring to support for organic certification in Tennessee, the

farmers placed the emphasis on education yet again. In essence, most consumers have never heard of either AWA or PFC.

A California rancher who has "been ranching all my life" currently works with a local non-profit to organize other grass-fed farmers and give local producers a stake in market share. She initially found PFC online:

> …and I did not end up going with it. I went with American Grassfed Association. Probably the marketing end of it. AGA give you a marketing benefit. To be honest with you, a lot of people use the same kind of management practices….they just don't certify.

Predator friendly certification was identified as an unnecessary eco-label. The appeal of certification in general is mixed in regards to these producers, who recognize the geographic limitations and plausibility of co-optation. For instance, Lucy in Pennsylvania stated: "Producers who get certified organic may benefit if they have the right market. But we already have enough of a support base, that I think we don't need to certify. Of course, I support the efforts of those in PFC." Herb, a southwest Virginia grass-fed lamb farmer reflected:

> So certification, has become a bit tainted…I've never had a single chef inquire or request any certification. This to me is a failure of essentially every label, every certification. They really don't have any value unless there is enough effort so that there is some consumerism that drives it…We're going to do animal welfare whether it is certified or not.

Herb encapsulated his commitment to sustainable agriculture regardless of certification. His distinct identification of "animal welfare" as a value he upholds through production speaks of a commitment to more than sustainable agriculture, but interrelated in philosophy. He identifies animal welfare the most explicitly of any of the producers. Herb's skepticism for eco-labeling is due in part to the risk of co-optation, and lack of accountability in standard enforcement. These producers

simply don't need the grassroots style eco-label PFC to distinguish their quality commodities. As discussed in the next section, in addition to the stresses of time and day-to-day management, PFC is also hindered by the lack of institutional organization within Keystone Conservation.

Barriers to PFC Eco-Labeling: Time, Infrastructure, and Geography

The most significant barriers to PFC as seen by these producers are first, the personal time commitment required in terms of certification research and application process completion, secondly, a of lack of institutional organizing by Keystone Conservation, and lastly the varied challenges of geographic location. Ultimately, these producers found the time investment a significant barrier to a certification that would likely not bring about additional revenue. With PFC lacking the price premium incentives generated by other eco-labels, a PFC commodity would not necessarily gain an additional price premium when primarily it is of upstanding quality. Educational outreach by Keystone Conservation, or any certification verification, is a facet of recruitment necessary for network expansion. Such outreach may entail pamphlets, literature, and/or eye-catching signs for booths at farmer's markets or grocery stores. Certification paradoxically entails limitations and opportunities.

Time is a huge limitation, or barrier, towards pursuing eco-labeling certification of any sort, for the Ohio family farmers who do recognize the potential economic benefits to eco-labeling. The challenges of time resonate both in application process and in the capacity of verification maintenance too. He brought

this up by saying: "We have no other eco-labels, which is probably a shame, as we are doing the stuff already. We use no pesticides or chemicals on our land…We farm in a way that uses animal mechanisms for predator control." Herb, who spoke to this topic in the previous section, too, finds the lack of oversight and outreach from Keystone Conservation as the biggest impediments. He eluded on the lack of price premium generation by the PFC eco-label and lack of salience in the marketplace too, as PFC garners no price premium.

The California AGA certified producer chose not to support PFC because of its non-lethal control limitations. As one member of a family farming operation explained, the personal limitations to PFC manifest in terms of not only time but the personal anguish of bringing relatives onboard to PFC who are not interested. Furthermore, "After certification, you can't go back and forth. Most of them probably have a problem with not being able to shoot anything." A family farm in Tennessee found that PFC simply was not a good fit for the scale of their operation especially in terms of geographic location. They reflected:

> It seems like the focus of the program was on a different kind of farmer from what and where we are, and a different kind of region. I have no problem with the program and am interested in doing that stuff.

Other southeastern producers identified predation threat levels as distinctions of geographic location. A less than clear articulation about the goals of PFC led Bob in Virginia to conclude that "the goals and objectives of the group were not well defined and combined with the lack of response (from Keystone Conservation), we decided we are not interested."

For these producers it does not seem difficult for them to use predator friendly practices without certification. They are directed by philosophical values rather than the need to seek a price premium. It is difficult to participate as a PFC producer when you are seeking price premiums from your certified commodities, knowing that PFC will not derive any price premiums. It is frustrating as a producer to inquire with the agent about the verification standards and not hear reasonable disclosure about how objectives are met. This is elaborated upon in the section on marketplace opportunities. Next, the values both economic and moral are eloquently articulated.

Ecological Values of Predator Friendly Practices

Seventy–five percent of these producers mentioned their lack of anticipation for an economic value-add on from PFC. Instead, the motivation to farm with the wild is rooted in longstanding commitment to sustainable agriculture, parallel to PFC producers. PFC producers articulate the idea of "values" as intangible feelings and motivations rooted in their ecological philosophy. One hundred percent of producers are utilizing attributes that fulfill PFC requirements. Had they formally applied, these producers most likely would have been certified, as the 2nd party verification is not rigorous. However, these "under the radar" producers feel a bit unrecognized by Keystone Conservation, in the capacity of outreach and communication. Institutional organization plays into the marketplace expansion potential, discussed in the next section. No matter the circumstances of the marketplace, these producers, like Lucy, are going to continue to "do all the

practices and believe [predator friendly] is right." Peggy, the Missouri free range geese producer reflected that while PFC is a "curiosity," and potential "sales tool," it ultimately will not affect her $110 per goose price point. Again, it is interesting that 75% of these producers who chose not to certify identify price premium generation as a reason not to follow through with the program. Compared to PFC producers, who specify the promise of education as a reason for certification, these producers do not view the eco-label as entailing such an opportunity. Perhaps this is due in part to geographic location, as PFC is in the west and most of these producers are in the Midwest or southeast. Peggy explained:

> Would PFC label enhance the price? It won't affect our price point. It is more reassurance that you are finding the product you want to find a supporting the values you want to support.

The AGA certified California rancher explained how the potential marketing incentives of PFC were not necessary, especially when a significant customer base is most concerned with human health which explains the interest in grass-fed as a desirable attribute. The AGA eco-label is generating a price premium for her commodity already, so under PFC "I did not need the marketing perks. I'm already doing the practices… A lot of my customers are really into the health thing." Herb, a grass-fed lamb and cattle producer in southwest Virginia spoke about the lack of necessity for recognition as a sustainable producer. He elaborated:

> Again, the certifying aspect had little value. Do we accomplish those principles symbolized? I can only guess that we do. So we are already doing it, without any motivation to hand a banner someplace. If we were certified, it would just be to say that we are going to continue with what we are doing.

There is nearly an even schism between producers who view eco-labeling in general as not necessary and those who view certain types of 3rd party verified eco-labels

with clear missions beneficial in generating marketplace premiums, like AWA. All these producers view PFC as an eco-label in a different category, one where the values of farming with the wild, or non-lethal management, cannot be quantified under current conditions. Finally, their perspectives on the future of PFC are discussed.

Marketplace Expansion: Potential Opportunities

While these producers are not necessarily going to approach Keystone Conservation in the future either to check into the status of PFC, the majority are interested in the eco-label's growth and future direction. Accountability is critical; 3rd party verification, employed in AWA and AGA, engenders expansion. Seventy-five percent stated that Keystone Conservation (or the future eco-labeling agent) needs to genuinely be more proactive in guiding producers through the certification process. The other 25% of producers are not invested in the idea of eco-labeling enough to offer specific recommendations. Peggy fortuitously brought up the plausible connection between the Predator Friendly movement and the AWA eco-label, calling AWA "the perfect partner" and citing such a relationship as "what all the local food groups are doing…having liaisons." Peggy had to find Keystone Conservation to inquire, a fact that she finds as a barrier tied to expansion in the long run. "I mean, I had to find Keystone. Is there a way for them to be more proactive in their marketing? I don't know how they get their name out there."

Peggy reflected that the original intent of the PFC label speaks for itself. "Predator Friendly elicits some curiosity and it is important because farmers are reacting to predators, not wildlife," she stated in a reminder about the idea of PFC as a statement holding more credence over CWF.

The Tennessee family farm experiencing predation mainly from feral dogs is certified organic and AWA. The exploitation of these labels to their fullest potential is not occurring currently due to time constraints with the day-to-day operations on the family farm. The future of eco-labeling promotion is brighter, if they start to utilize AWA egg-cartons for marketing. These farmers went on to say that "AWA is a pretty big deal" in terms of generating sales and receptivity in the marketplace. The Ohio family farm specializing in heritage vegetables and animals finds CWF as "much more palatable to people than PF, just because of the word Predator. We still do all the practices and believe it is right, I have just never taken the time to go through the certification process." Others feel strongly about opting out of certification. Herb and Bob, both farmers in Virginia, are the only two producers definitely not anticipating an inquiry into the successor of PFC. Herb says a bit disdainfully …they are searching for new avenues of revenue rather than trying to solidify a position based on strength by making the label ubiquitous and valuable to a consumer. And so, the objective of becoming Certified Wildlife Friendly is simply to make the pond bigger…"

The AWA connection is very probable in the future, as discussed further in the Conclusion, with CWF steered by the substantially better funded Wildlife Friendly Enterprise Network, a recipient of foundational support. In the absence of

a banner or economic reward for predator friendly farming, these producers will only continue producing with an integrity that embraces the role of ecosystem predators and the associated risk. Understanding the reasons why these producers did not seek PFC, in light of doing the practices, generated solid recommendations towards strengthening the certification movement, especially through collaboration with the AWA eco-label. However, there are many mechanisms besides eco-labeling to improve the sustainability and equity of production, evidenced in these perspectives from these particular producers.

CHAPTER 6
CONCLUSIONS AND IMPLICATIONS

"It is the individual farmer who must weave the greater part of the rug on which America stands."
-Aldo Leopold

Summary of Findings

By studying the values, implementation, and factors affecting the future advancement of the PFC eco-label, this thesis research engaged in a process of discovery and reflection leading to recommendations about the future of PFC. From the standpoint of Polanyi's theory, the free market alone cannot be relied upon to provide economic and social justice. Consequently, eco-labels offer the promise of price premiums and simultaneous environmental benefits, generating a voice in the marketplace for concerned producers. A label's success is dependent upon knowledgeable consumer support. PFC certification is not generating a commodity price premium. Notably, despite the fact that PFC is not generating a price premium, small numbers of dedicated producers utilize such practices because they simply believe it is the right thing to do, from a philosophical and ethical standpoint. Predator friendly practices are furthering the "working landscape" and addressing the duality between agriculture and conservation.

This research revealed that the main factors that have limited the fulfillment of PFC values and goals are 1.) the lack of price premium generation; 2.) the low salience of the PFC eco-label among producers and consumers, articulated by nearly all producers as an "educational" barrier; 3.) the lack of accountability due to absence of 3rd party certification; and 4.) the low level of institutional outreach by

Keystone Conservation to producers and consumers. PFC and non-PFC certified producers believe that future advancement of the PFC eco-labeling effort will be primarily driven by "education" and the outreach efficiency of the institutional certification agent. Such concerns are valid; there is evidence that 2nd party verification systems have struggled to stay afloat financially in the recent past. Monetary foundational support is necessary to build credibility and salience in the marketplace, evidenced in eco-labeling case studies of FSC, AWA, and MSC in Chapter 2. According to the standpoints of producers I interviewed, money spent on outreach and educational opportunities pays off in the long run for an evolving eco-label to gain salience in the marketplace, as in the case of AWA. The current transition of PFC to CWF, discussed in further detail in the Conclusion, offers much opportunity for concept growth, future 3rd party verification, organizational improvement, and possibly fulfilling the promise of garnering a price premium in the marketplace.

Returning to the literature reviewed, eco-labeling scholar Barham (2002) identified the need for a precise effort to research eco-labeling, arguing that such values-based labeling is needed to re-embed the food economy within the framework of greater social economy. Eco-labeling fundamentally presumes the generation of a producer price premium based upon production inclusive of special process (humanely raised/ hormone free cattle, for example) guaranteeing quality. As authors Allen and Kovach (2000) elucidated, eco-labeling can lead to a stronger and more mobilized grassroots consumer base voting with their dollars in alternative markets, while remaining within the framework of capitalism.

Furthermore, Barham (2002: 350) identifies values-based labels "as one historical manifestation of social resistance to the violation of broadly shared values by systemic aspects of the free market."

To accomplish the goals of this research, Chapters 1 and 2 situated the PFC movement within a larger ethical and theoretical context of eco-labels. Chapters 3 through 5 discussed the qualitative interviews with PFC and non-certified producers as well as the movement's founders. As the qualitative data in this research revealed, the producers in this study see embracing sustainable agriculture in its truest form entailing predator friendly production. Keystone Conservation's producer network is driven by a land ethic combined with an agrarian ethic, without the need to necessarily draw attention to their practices with an eco-label. Over the last 20 years, the predator friendly movement has evolved into an institutional organization working for the larger goals of promoting sustainability and rural livelihoods. While PFC appears to have been the least successful of the non-profit's programs in terms of economic impact, in practical application, predator friendly applications are gaining much traction. The players in the predator friendly movement "have begun to build a pathway for necessary environmental and social change" through a commitment to sustainable agriculture and rural livelihoods (Hassanein 2003: 80). In the "New West," this is significant.

Lack of Price Premium Generation

Over two decades ago, when the Predator Friendly Wool Cooperative was starting up, the fundamental goal was to provide a forum for selling high quality,

Montana grown wool at a price premium. It was hoped that knowing customers would willingly pay more for a commodity representing the true cost of production with native predators. The promise of PFC seemed bright. Society would gain from the stewardship of charismatic wildlife, respect for ecological integrity, and the promise of an intact landscape as consumers pay the true cost of production where predators roam the landscape. A founder recounted the main priority of the PFC eco-label as illustrating that "sustainability makes economic sense," based upon a long term respect for the biological inputs that are responsible for the best quality commodity. As the years passed, and the wool market faltered, other commodities were brought under the eco-label of PFC and the economic presumption of price premiums did not meet original expectations. Operating under several different names, the non-profit steering the course of PFC faltered at times economically, yet was unyielding in the intent to promote the co-existence of agricultural production and native wildlife.

On the surface, it appears that PFC has experienced very limited success. A quick glance at the number of PFC producers implies that the two-decade-old eco-label is a disappointment. Nonetheless, the qualitative analysis revealed that the concepts employed behind certification are fulfilling their promise in making meaningful contributions towards coexisting with wildlife while producing food sustainably. In some cases, price premiums are generated by organic and AWA commodities sold by the producers interviewed in this research who practice predator friendly techniques, but the seal of PFC alone is not generating a price premium. As previously noted, this is most likely due to the lack of certification

with 3rd party verification coupled with the lack of consumer outreach, which have helped generate a commodity price premium for some labels. In a few cases, these producers are certified under other values-based labels such as AWA or organic and do receive a price premium; organic is a great example of an eco-label with salience in the marketplace. Lacking a price premium for being predator friendly is not discouraging these producers from using predator friendly practices, or "farming with the wild." The interviewees always returned to the underlying philosophical values rooted in ecology as the major motivation for their predator friendly practices, regardless of certification or not. A price premium would be a nice reward of the marketplace for their efforts, but it is neither expected nor is it crucial at this point in time. However, if predator friendly practices are to expand, direct consumer education along with 3rd party verification is needed to bring about the possibility of a price premium in the future.

The Legacy of PFC: Education

The actors in the Predator Friendly movement, a conglomeration of certified and non-certified yet practicing farmers and ranchers are indeed challenging industrial agriculture on a small yet growing scale. The application of predator friendly practices by certified and non-certified producers continues to broaden the dialogue about ecologically sound and sustainable agriculture practices. Significantly, "education" was explicitly mentioned and suggested in nearly all of the interviews from certified and non-certified producers. All the 17 PFC producers interviewed specified "education of consumers" as a goal of certification. Fifty

percent (4 individuals) of potential PFC producers specified "education" as a necessary facet of marketplace expansion for this eco-label. The other 50% who did not explicitly mention "education," alluded to the need for more proactive marketing of the eco-label itself to garner a higher volume of producers. The attention by the certification agent to producer recruitment is a necessary facet of growth and expansion. Producers believe that the expansion of predator friendly practices and the eco-label itself will become more appreciated "out of pure necessity in the future," as stated by Tom, a California rancher. Consumers are coming to understand the importance of predator friendly practices for ecologically sound and sustainable agriculture.

Eco-Labeling Comparison: Lessons Learned from Lack of 3rd Party Verification

Keystone Conservation, to recall, the agent of PFC, is a 2nd party certifier and this degree of certification is a disadvantage in the marketplace. The PFC eco-label counters the industrial marketplace norms through small shifts in rooted in process and quality. The application of predator friendly practices is embedded within the greater context of sustainable agriculture production where in the holistic sense of the word, quality commodities are grown. Verification of process standards gives legitimacy to the higher price for products in the marketplace. Compared to the other eco-labels investigated in this thesis, the small-scale PFC producers are particularly driven by philosophical or moral values rather than the price premium, as they do not receive one. All of the producers interviewed, both certified and uncertified, are choosing predator friendly operations based upon a commitment to

a land ethic. This entails being attuned to cues from predation threats and accordingly making adjustments to agricultural practices. They are bearing the burden of risk entailed in a sustainable working landscape, unlike an industrial farm which views agriculture in terms of utility and efficiency. In the end, part of the great reward entailed in farming with the wild is the manifestation of the quality of the commodity enlivened by its journey from farm to table.

Earlier, it was discussed that certification labels such as organic, FSC, MSC, and AWA, which all have penetrated the marketplace, used 3rd party verification to the tune of varied economic success. Through the example of FSC, it is evident how grassroots activists became "embedded" in new organizational fields, bringing radicals and moderates together, all seeking an end to deforestation and a shift to market-based sustainable forestry (Bartley 2007: 248). Such a "channeling," of efforts and goals provides insurance by "allowing movements to consolidate their gains and protect themselves against attack," occurred in the FSC and is currently happening to PFC efforts (Bartley 2007: 248). The evolving transition of PFC to the more inclusive CWF should lead to marketplace expansion and thus a widened consumer base. Foundational support through philanthropic funding will widen the field of the endeavor, and in the case of PFC transitioning to CWF, perhaps eventually will garner marketplace penetration through economic incentive related to 3rd party verification. [ii]

In some cases, PFC producers and potential PFC producers certify their commodities with other eco-labels that generate a price premium such as organic, AWA, or in one case, AGA. Such 3rd party verified eco-labels have a history of

comprehensive verification standards, accountability through yearly audits, a strict application process, and a better institutionally organized framework than a small, sometimes struggling non-profit such as Keystone Conservation. Besides more funding from foundations for expansion, these eco-labels resonate more with consumers than PFC because of institutional outreach and education. A detailed plan of evaluation and a sufficient budget to implement the efforts for clearly defined goal attainment is critical. Market opportunities should be capitalized upon simultaneously as educational opportunities, with the goal of resonating with a wider audience. The seal of verification should be placed directly on the commodity.

The overlap between organic and AWA is significant in terms of corresponding standard attributes and myriad opportunities for future collaboration. If organic certification lives up to its potential, in terms of commitment to truly ecologically sustainable agriculture, the application of predator friendly practices would be enforced. According to those interviewed, AWA generates a price premium because the salience of represented attributes (free of artificial growth hormone, and animal suffering) engenders a willingness to pay from the consumer standpoint. Furthermore, the greater institutional organization and 3rd party verification present in AWA and other certification schemes engenders a recipe for success. This is an unanticipated finding that emerged directly from the data, as PFC and non-certified producers brought up the potential for collaboration between AWA and practicing predator friendly producers, reflected in both Chapters 4 and 5. A replication of AWA inspired accountability and marketing

practices under CWF is recommended by PFC and non-certified producers alike for the efforts of existing as predator friendly to gain receptivity in wider circles.

The Necessity of Consumer and Producer Outreach

One of the original founders, and a self-labeled activist of the PFC label and predator friendly movement stated: "The development and distribution of the concept is as much about the expansion of the certified label," meaning that judging PFC simply by number of certified or potential producers fails to recognize the gains made in predator co-existence as part of sustainable agriculture efforts over the past 20 years. Predator friendly efforts will only grow in the market through nurturing consumer educational opportunities where they come to see predator friendly practices as important enough to pay a price premium for the guarantee. It is plausible to suppose, that there is a consumer education deficit about predator friendly practices, but this research did not directly explore this issue. The organization behind the eco-label must bear the burden of proactive outreach if it wants greater marketplace penetration.

The embracement of ecologically sound production practices resonates with the consumers who are presently buying the commodities, ranging from Montana grass-fed lamb to Wisconsin cave aged sheep cheese to VA grass-fed beef to Washington state honey and more. Only two producers interviewed who are certified predator friendly by Keystone Conservation actually put label the PFC eco-label on their commodities. This seems an institutional organization failure. The majority of producers feel that it is the quality commodity, foremost, that draws

their loyal customer base. Unfortunately, Keystone Conservation was too small and lacked the funding for such outreach efforts. An organization cannot be fueled on passion alone, evidenced by the PFC program. However, AWA provides certified producers with literature to hand out to customers explaining the benefits of humanely raised and pastured meat. According to those interviewed, AWA provides sign and banners that draw the eye and attention of the consumer to the farmer's booth at the market. Besides the consumer outreach, AWA is financially situated to campaign for additional producers and offer details about the tangible benefits to certification.

The holistic recognition of the connection between process and quality is part of a fundamental commitment of sustainable agriculture. This commitment is part of the original intent of organic and AWA eco-labels. To PFC producers, quality is also defined not only by the end product, but production processes that are ecologically sound and include recognizing the role of predators amid the landscape. More than anything, as stated best by a PFC producer who sees the process behind the eco-label, the initial quality of the commodity must be very high before a consumer will pay more for the process. The organization behind the eco-label must be proactive and assertive in closing the knowledge gap between the ecological values held by committed producers and the understanding and awareness of the importance of those values by consumers. Education must play a pivotal role to gain salience and receptivity economically and philosophically in the marketplace.

Predator Friendly Efforts: In and Out of the Marketplace

As the interviews of producers both certified and non-certified revealed, predator friendly practices are employed simply because the producers feel it is the ethical way to farm. While the PFC eco-label has not fulfilled its potential in establishing a price premium, there is much to celebrate regarding the application of predator friendly practices on farms and ranches across the country for the benefit of biodiversity conservation, in publicized support and stealthy operations. The use of livestock guardian dogs, electric fencing, rotational grazing, range rider patrols, and making proactive adjustments to pasturing are practices that work across the spectrum of production, elements of the sustainable agriculture movement. The growing awakening to predator friendly practices is a step in the right direction toward ecologically sound and humane agricultural practices. As mentioned previously, these predator friendly producers are players embedded within the larger framework of sustainable agriculture. They are a small group of committed producers that can potentially push the efforts of predator friendly production towards realizing its core commitments to ecologically sound sustainable agriculture. Sustainable agriculture is a social movement explored by a number of food and agriculture scholars (Barham 2002). Many varied ingredients and players are embedded within sustainable agriculture. PFC eco-labeling efforts and subsequent transformation to Certified Wildlife Friendly (CWF) necessitates further studies but it is clearly a growing grassroots effort. Predator friendly practices make sense in terms of long-term efficiency, and such practices are gaining traction and making inroads with producers having traditional viewpoints of predator

management, such as lethal control. This recognition is a fact that the founders can celebrate. PFC efforts represent a small sub-set of the sustainable agriculture movement.

Embedded Within Sustainable Agriculture

Producers are expanding their networks through grassroots circles based upon sustainable agriculture practices that include non-lethal techniques but not specifically marketing the PFC appeal. Fundamentally, the PFC eco-labeling effort is embedded within sustainable agriculture. Sustainable agriculture is a choice of production that "can never become abstract because it has to be practiced in order to exist" (Berry 2002: 239). This deeply engrained commitment to sustainable agriculture emerged as the most basic reason for farming with the wild. This idea is best encapsulated best by the producer who says, "It is less about the eco-label and more about the integrity of all involved." Regardless of certification or not, the motivations of these producers are to realize ecologically informed agricultural production practices with special respect for wildlife as well as livestock animal welfare.

This research evaluated an eco-label that was initially greeted with much interest and publicity but has grown modestly over the last two decades. However, it has survived and appears to be on the verge of a new phase of its evolution as it begins a migration to a larger, seemingly well-organized eco-label that appears to offer the promise of economic market expansion and ethical values expansion simultaneously. The lessons over two decades of the PFC initiative illustrate the

grassroots effort of producers embedded within sustainable agriculture, applying predator friendly practices because they fundamentally believe in them. Quality products are already produced for committed customer bases, so the next challenge is leveraging eco-labeling outreach, under the new model CWF. Embracing 3rd party verification under a better institutionally organized non-profit will synergistically raise the bar of participation and marketplace expansion. There is no margin for lackadaisical effort in facilitating 3rd party verification by the non-profit steering the CWF label. Knowledge dissemination and advertising in the marketplace is part of the "education" component necessary for expansion as voiced by certified and non-certified producers. Facilitating partnerships with AWA, for example, may expand the values of PFC/CWF to a larger circle of certified producers and consumer base in the larger marketplace. Humane treatment of animals could be extended to native predators, under AWA, for example. Lessons learned from the evolution of the integrity driven PFC eco-label are valuable to any grassroots effort engaging in proactive, tangible work from the ground up. A current PFC sheep rancher in Montana encapsulates the heart and soul of the movement best:

> One of the ideas behind Predator Friendly is that we're interested in educating the consumer about the real challenges of agriculture. Consumers have to understand that they are part of the deal; they need to carry part of the burden as well as reap the rewards of responsible agriculture.

The journey of PFC is meaningful on many different levels indicated by these voices.

PFC: Rooted in Non-Lethal Management, but Lacking Accountability

A close look at PFC illustrates that as certification existed at the time of this research, there is significant potential for abuse. As PFC stands currently, this research offers no support toward any present abuse, largely due to the self-reported philosophical and ethical reasons producers utilize PFC practices. Nonetheless, the potential for abuse is twofold, since the eco-label is primarily built on trust with no field verification by Keystone Conservation prior or during certification. Primarily, the producers could use lethal methods and not get caught while advertising commodities produced under Predator Friendly production practices. Secondly, as articulated by the producers interviewed and those in the Founders Circle too, there is an underlying assumption that producers are all committed to sustainable agriculture practices (indeed they are). However, this is also a potential place of abuse. Furthermore, since PFC does not generate a price premium in the marketplace on its own, the potential for abuse is low. In the future, if 3rd party verification is attained, the trust abuse issue should be quaffed due to a new standard of accountability.

All 17 of the PFC producers and all 8 of the potential PFC producers I interviewed expounded upon their commitment to "sustainable agriculture" foremost. They articulated this as farming and ranching in regards to fencing off waterways from livestock, not using chemical inputs, synthetic growth hormone, etc. Also, these producers elucidated their commitment to providing wildlife habitat and mitigating conflict through the usage of mechanisms such as rotational grazing and guardian animals, specific components of "predator friendly" production.

Additionally, the majority of these producers explicitly identified how important farm animal welfare is to them, in terms of raising free-range livestock in pasture with gentle handling as a means to an endpoint of a quality commodity. They feel good about the final product morally and its taste due to the specific identified attributes of production. The producers interviewed are all clearly committed to predator friendly methods of production based upon their own moral imperatives for sustainable agriculture and animal welfare, regardless of certification. Even in the realm of organic and sustainable agriculture, non-lethal methods of predator management are often overlooked, even when an operation strives entirely for sustainable agriculture. This is unfortunate and should be reconciled. Transparency based upon 3rd party verification and a partnership with the AWA eco-label offer opportunities to correct this.

On the PFC application, there are no questions regarding methods of production in the tradition of sustainable agriculture, although additional certifications held are requested for listing. A number of PFC producers are certified organic (7) and AWA (4) while potential PFC producers also are certified organic (1), AWA (2), and AGA (1). All these eco-labels are couched within sustainable agriculture. As elucidated by these producers, these aforementioned labels do generate a price premium while PFC does not. The PFC application materials specifically ask about usage of guardian animals, tools utilized to reduce vulnerability of livestock, any attempt at lethal control on the property during the last 2 years, signs of wildlife and native predators amid the landscape, and any incidents of depredation in the past 5 years along with the response to the incident.

Due to the attributes entailed in production practices on all these operations, it is unfortunate that these commodities are not generating a price premium. Arguably, the lack of requirements by Keystone Conservation that an operation raise livestock in the tradition of sustainable agriculture shifts the meaning of certification very strongly towards animal welfare. The application's emphasis on non-lethal predator control without any questions about pasture based livestock and/or usage of synthetic chemicals or growth hormones merely seeks accountability for non-lethal animal/wildlife management. PFC itself appears to be a values statement about the welfare of wildlife, where strictly not killing predators makes a producer eligible for certification on paper. Such a simplification is not the intent of the program, however. The lack of clear requirements about the practice of sustainable agriculture weaken the integrity of PFC considerably as the assumption is that PFC producers are steadfastly committed to farming in such a tradition. So far, the assumption is true and exploitation has not occurred as of yet.

As the interviews revealed, since the current producers interviewed are simultaneously committed to sustainable agriculture, driven by moral imperative, the potential for abuse today is minimal. The lack of PFC price premium generation also plays into this significantly. Private working lands are increasingly critical as habitat reserves. It is important to keep these distinctions in mind as the current transition to Certified Wildlife Friendly (CWF) occurs, a seal of verification "for production that contributes directly to in situ conservation of key species…working to change agriculture from a model of exploitation and depletion to one of conservation and production" (CWF Press Release 2011). Next, the historical

perspective of CWF explains how PFC is poised to expand and gain marketplace salience under CWF organization including new mechanisms of accountability.

Towards Certified Wildlife Friendly (CWF)

Keystone Conservation has experienced institutional disadvantages as a small non-profit. However, it has also exhibited great resiliency and never strayed too far from its values and goals. During times of financial struggle, choices were made to focus on other programs facilitating rural livelihoods, and some great program gains were accomplished in landscape scale conservation in capacities apart from PFC. Work involving PFC, especially outreach and recruitment, dropped down to a minimal percentage between 2008 – 2011, with a focus on other initiatives (Breuer 2011). According to Keystone Conservation's former Predator Friendly Program Director, tangible gains were made regarding Range Riders, Bear Aware education program, and more during the years from 2004-2011, when work on the PFC program was happening tangentially in the background (Breuer 2011). Very few new producers were certified in that period.

According to a Certified Wildlife Friendly Press Release from 2011, the turning point to a new direction occurred in March 2007, when representatives from Keystone Conservation gathered together with representatives from parallel wildlife conservation non-profits of international scope, discussing how to draw attention to carnivore conservation issues specifically tied to sustainable agriculture. During that time, the idea of integrating PFC under a broader umbrella eco-label gained traction, and plans were initiated to transition from PFC to CWF.

This may resonate with a more expansive consumer base, as CWF will depend upon 3rd party verification and is international in its' scope of wildlife protection and rural livelihood preservation (Breuer 2011). Over the summer of 2011, Keystone Conservation mailed all PFC producers letters explaining the transition. The merger formally occurred in November 2011, and PFC is no longer formally overseen by Keystone Conservation, but instead housed under CWF, held by the Wildlife Friendly Enterprise Network (WFEN) (Breuer 2011). As of spring 2012, all PFC information is still found on Keystone Conservation's website. To understand this new direction for PFC, a historical understanding of CWF is necessary.

CWF's Eco-Labeling Evolution

In 2007, the WFEN was established "to promote wildlife conservation through facilitation of responsible production practices, enterprise development, education and branding," with an emphasis on the direct link between commodity production and conservation (WFEN 2011). In 2008, CWF was launched as an eco-label in Barcelona at the World Conservation Congress. CWF's seal of approval "certifies the use of best management practices in rural areas for production that contributes directly to in situ conservation of key species" and promotes rural livelihoods and conservation through price premium generation (CWF Press Release 2011). In 2009 the WFEN became a registered nonprofit and gained trademark status for the CWF brand; it is currently 2nd party verified but striving for 3rd party verification in the next year (CEF Press Release 2011). The ISEAL Alliance, "the global association for social and environmental standards" recognizes CWF as

"an emerging initiative," on the course to becoming an Alliance member, which will theoretically strengthen its marketplace integrity (CWF Press Release 2011). Current members of the ISEAL Alliance include the FSC, MSC, Fairtrade Labeling Organizations International (FLO) and more. ISEAL members meet the requirements for the Alliance's Codes of Good Practice, which establish criteria for measuring and vetting the credibility of standard-setting principles in voluntary sustainability standards systems, like FSC, for example. In the future, CWF may become a full-fledged member of the ISEAL Alliance, which will place it directly in the accountability status of eco-labels analyzed earlier in Chapter 2, which are all 3rd party verified.

CWF's eco-label is held by 11 global enterprises claiming to protect 100 endangered species in Asia, Africa, Latin America, and the U.S (CWF Press Release 2011). By creating larger economies of scale for PFC/CWF commodities, the collaboration aims to have a distinct and far reaching impact. CWF emphasizes the interdependence of working landscapes and livelihoods, a standpoint in common with PFC. For the conservation of carnivores across the world, the WFEN is "assisting producers to reach new and dynamic markets," establishing the standard that includes such brands as Tiger Friendly of the Russian Far East, Snow Leopard Enterprises of Central Asia, Cheetah Country Beef of Namibia and more commodities being produced with practices tailored to predators (CWF Press Release 2011). For example, Snow Leopard Enterprise commodities include felted rugs, ornaments, and booties made by women from herding families using sound livestock practices to co-exist with the snow leopard in the rugged mountains of

Central Asia, Mongolia, and Pakistan (SLE CWF 2011). The commodities bear the CWF seal of approval, and according to Snow Leopard Enterprises, increase household income by 25-40% (SLE CWF 2011).

Predator Friendly Certification (PFC) Migration Efforts

According to a former Program Director at Keystone Conservation, this transition will greatly expand the market for PFC certified producers and gain recognition for wildlife stewardship, raising the salience of predator issues with current producers and future consumers. In the future, producers who certified under PFC will participate in field audits and experience marketing enhancement through a 3rd party certification process (Breuer 2012). If all goes as planned, by summer 2012, AWA's transparent audit team will have taken over as a 3rd party auditor for CWF (Breuer 2012). Fifteen or so farms will be subject to the initial check-list of standards (Breuer 2012). CWF may facilitate a reframing of the debate swirling around predators and agriculture in the spirit of adaptive management. Transition to the "wildlife friendly" eco-label risks a watering down of original goals and values of the "predator friendly" eco-label, as stated by 20% of producers. Eighty percent believe that CWF will engender the potential for marketplace expansion and price premiums. Ironically, this would fulfill the original expectation of the PFC eco-label. In the larger context of CWF, the risk of predator friendly applications dilution is negligible in practice. In essence, the transformation of PFC to CWF is a migration.

Quintessentially, founders and producers in the predator friendly movement describe the efforts as changing the conversation in agriculture," as recounted by a certified producer, the WFCN seeks a dialogue of adaptive management on a wider scale (CWF Press Release 2011). There are myriad examples of progressive, non-lethal predator management practices that are highly visible as well as understated, a fact pointed out not only by non-certified producers I interviewed, but also by the former PFC Program Director.[iii] The legalities of PFC are no longer overseen by Keystone Conservation, although the nonprofit remains steadfast in terms of commitment to furthering the evolvement of the eco-label according to the Memorandum of Understanding (Breuer 2012). At the time of the PFC to CWF transfer in November 2011, the goals for next 12-18 months included developing and testing a field verification system for US and Canadian producers and providing certification and marketing support to 25 initial producers (with expansion to 100 over 2 years) (CWF Press Release 2011). During 2012, CWF plans to utilize a major food industry brander's pro bono services to help certified producers appeal to "lifestyles of health and sustainability consumers," an evolving market force (CWF Press Release 2011).

Current PFC producers are not exactly grandfathered in under CWF; they remain under the PFC eco-label until certification steps are taken to qualify as CWF. During the summer of 2011, AWA "offered in kind support to conduct audits for twelve Predator Friendly producers," after the harmonization of standards between PFC and CWF, facilitating more inclusive dissemination of animal/wildlife conservation practices (CWF Press Release 2011). This illustrates the recognition

by institutional players of collaboration potential with similar eco-labels. AWA and organic, for example, are better known strategic labels that may function within a broader dialectic, as Barrett et al (2005: 39) reflect, they may "enlist ordinary people into broader projects of social change" (Guthman 2007). Given the transformation of PFC to international CWF, funded in part by sponsoring foundations, it will be interesting to observe the successes and challenges over the next few years as 3rd party verification is implemented.

Judging the history of PFC from an economic perspective, the movement to CWF is a logical, smart move toward expanding market potential for producers wishing to capitalize upon their practices. In the long run, it shall be determined if the institutional advantages, including projected 3rd party verification and educational outreach of WFEN will generate a price premium for CWF commodities. As one of the players in the PFC founders circle (2011) reflected, "I think that CWF is a far easier story to tell. I think that people say: What's a predator? What's that? Most people don't even think about animals that way. CWF is a great term." Furthermore, it is symbolic of the growing awakening to food and the native landscape that nurtured it. The fledgling PFC movement's adaptation and evolvement over the past two decades illustrates that practices of farming with the wild are no longer the daunting proposition they were once. It will be very interesting to follow economic goal attainment of the CWF eco-label in the marketplace over the next decade. For eco-labeling profitability, health of the institutional organization is just as important as the health of the land that sustains it.

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APPENDIX
Interview Guides

Introduction. Thank you for agreeing to participate in this interview. These interviews are part of my thesis research, as I am seeking to understand the promise and barriers of Predator Friendly Certification (PFC). I am really excited to be studying this eco-labeling program, as a student I am really interested in family farming/ranching and how native predators fit amid the working landscape.

Before we get started, I want to let you know that your identity as a participant in this study will remain confidential. Your name will not be used in any presentations or written reports.

If its OK with you, I would like to tape record the interview. Taping ensure that your views are accurately recorded, and it allows me to focus on what you are saying. Does that sound ALRIGHT to you?

If YES, turn on the recorder. If NO, then I will take hand written notes.

<u>The Predator Friendly Certification Movement's Founders:</u>

History of Commitment.

1. You are one of the PFC movement founders. What initially motivated you to get this program off the ground?
2. Please explain the benefits of "certification."
    a. Probe: As a certification agent, how did or do you oversee PFC?
    b. How has this changed over the years?

Structure and Goals.

3. How would you define the structure of PFC, a values-based label?
    a. What are the goals?
    b. How have these goals been met?
    c. Probe: What has changed since the program began? When has it been most successful? Has it stalled at times?

4. There are 20 PFC producers currently. Would you have expected a greater number at this point? Why or why not?

Promise of this Eco-Label.

5. Oversight: What do you see as the program's greatest success? Has its original promise been fulfilled?

6. What do you see as the program's greatest challenges?
    a. Probe: What aspects of this eco – labeling certification have been frustrating, seen from the oversight perspective?
    b. Probe: Are you pleased with the quality of enrolled producers and commodities?
    c. How do you rate Keystone Conservation as a certification agent? Explain.
7. Keystone has been concentrating conservation efforts elsewhere recently. Why was the emphasis taken off of certifying more producers as Predator Friendly?

    a. Probe: Please comment on the current status of this eco-labeling program, PFC.

Future: the bigger picture.

8. Where is Predator Friendly Certification labeling headed in the future?
9. Please share your knowledge of "Certified Wildlife Friendly" labeling, a direction for PFC you expressed interest in when we talked informally.
    a. Probe: Is this the right direction for PFC to move under umbrella labeling? Why or why not?

<u>The Predator Friendly Certified (PFC) farmer/rancher/producer:</u>

History of Commitment.

1. Would you please share a bit of your history as a rancher/farmer participating in PFC?
    a. Probe: What kinds of predators are found on your farm or ranch?
    b. Why? When did you become especially concerned about particular predators? Probe, if necessary: perceptions.

Predator Friendly Certification.

2. How did you become aware of Predator Friendly Certification?
3. What initially drew you to certification?
    a. Probe: What factors played a role in your seeking certification?
4. What were you goals in certifying?
    a. Were these goals achieved (or not)?
5. How does certification help producers to benefit?

Application: Evolvement.

6. How has certification labeling changed your mode of operation? Or not?
7. What are the main methods you use to apply PF practices?
8. How difficult (or easy) are the practices for you to apply?
9. Looking back, how has your operation evolved since you first became certified? I am interested in learning about the ways producers view and utilize eco-labeling to achieve recognition for the way your commodity is produced.
    a. Has being Predator Friendly Certified changed the way you market your commodity?
10. What values do you see behind the PFC movement?
    a. Probe: How does this label compare with other eco-labels of the marketplace?
    b. Anything else?

Future: the bigger picture.

11. What factors play a role in where this eco- label is headed in the future?
    a. Probe: Any more reflections on the past or present joys or challenges?

12. What do you know about "Certified Wildlife Friendly" labeling?
    a. Probe: If aware: should PFC move under this umbrella labeling in the future? If so, what is the appropriate timescale?
    b. Probe: If not aware, offer an explanation and gage interest.

Potential PFC Producers --- Inquired yet choose not to seek certification

History of Commitment.

1. Would you please share a bit of your history as a rancher/farmer participating in the alternative marketplace?
    a. Probe: Tell me about the native predators your farm/ranch co-exists with.
    b. Probe: How has this changed over the years?
    c. Why? When did you become especially concerned about particular predators? Probe, if necessary: perceptions.

Predator Friendly Certification.

2. How did you become aware of Predator Friendly Certification?
    a. Probe: When did you approach Keystone Conservation about certification?
3. What initially drew you towards certification? What values?
    a. Probe: What kept you from seeking certification, ultimately?
    b. Probe: Please go into more detail about the impediments and barriers.
4. How does Predator Friendly Certification help producers to benefit? In what ways?
    a. What are the promises (benefits)?
    b. What are the pitfalls (impediments and challenges)?

Future: the Bigger Picture

5. You approached Keystone Conservation, but choose not to certify as a PFC producer. Why? What are the limiting factors?
    a. Probe: Please explain the greatest advantages to such certification. Also, please explain what you see as disadvantageous.
6. Do you currently value-label any of your commodities?
    a. Why or why not?
7. Do you think you will re-visit PFC in the future?
    Probe: If the program evolves into an umbrella labeling of "Certified Wildlife Friendly," will that make any difference towards your level of interest?
    Probe: Anything else?

[i] This founder (#5) elaborated: We came up one day to the pasture and saw coyotes mousing the field…neighbors wanted to shoot them…We said hold off, then someone did (illegally) shoot them after about 10 offers. Someone shot 3 coyotes. And in 48 hours we lost over 20 sheep, and the coyote dynamics were upset. So the trapper tracked the offender to a den 6 miles away…so what does that tell you. It sounds like it was upsetting the pack dynamics. And it is just like dog behavior. I immediately did some research…

[ii] Charitable foundations, or CWF sponsors, are listed on the website available at: http://www.wildlifefriendly.org/about-us/sponsors.

[iii] For example, she repeatedly emphasized the following case study in California. In response to the proposed adoption of using Compound 1080 in a test pilot to kill coyotes in Marin County, CA, in the mid 1990s (a community known for environmental responsibility and its local foods movement) stakeholders mobilized in a series of roundtable discussions to pursue a compromise with Wildlife Services (Project Coyote: News 2012). In 2000, the County Department of Agriculture's Livestock Protection Program was implemented by channeling taxpayer money that formerly went to Wildlife Services into assisting qualified producer with livestock guardian dogs, llamas, enclosure practices, shepherding, and compensation for predation (Project Coyote: News 2012). Today, over 80% of Marin sheep ranchers are program participants. While highlighting the grassroots power of bringing about institutional change, the program stands as a model ripe for replication in other places. CWF may yield transformative results for the former PFC program in the spirit of this local stakeholder driven campaign, seeking adaptive management.