CANADIAN PRODUCER AND CITIZEN PERSPECTIVES ON FARM ANIMAL WELFARE: IDENTIFYING SHARED AND DIFFERING VALUES

by

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Abstract

While interest in the “proper” care of food animals dates to early Greece, 20th century cultural developments in the West brought about an explosion of policies and programs intended to ensure suitable care and handling practices for food animals. “Animal welfare”, however, is a complex term reflecting a wide range of elements. Hence, animal care policies often lead to confusion and disagreements. Given that animal welfare preferences tend to reflect fundamental values and attitudes, agreement on animal care practices are most apt to ensue if such practices reflect shared values and attitudes among vested stakeholders. In an effort to contribute to the development of broadly acceptable policies and practices, in-depth interviews were conducted with beef cattle producers (n=23), pig producers (n=20), and the public (n=24) in the quest for shared or overlapping values regarding farm animal welfare. Areas of agreement include: (i) the importance of humane handling plus good health and biological functioning, especially emphasized by producers; (ii) that consumers have considerable power to dictate preferred care practices and that producers are constrained by economic pressures in competitive markets; and (iii) that citizens lack sufficient understanding of contemporary production methods. Commensurate policy recommendations intended to build on areas of agreement include: (i) the promotion of shared terminology emphasizing animal care; (ii) incorporating elements of natural living into intensive production systems; (iii) promoting joint stakeholder pilot projects to test welfare-oriented production methods or prevent catastrophic animal care failures; (iv) facilitating a trustworthy system of product labelling; (v) encouraging transparent producer or industry driven, welfare-related initiatives; and (vi) encouraging stakeholders to use publicly trusted educational resources instead of marketing-oriented representations of animal care practices. Future research recommendations include: (i) more qualitative and empirical studies of consumers’ welfare-related purchasing practices; and (ii)
exploring producer welfare concerns in the broader context of production or management priorities or
values. Contributions to existing knowledge include the identification of shared and differing values
among Canadian stakeholders, challenges to blanket welfare criticisms about commercial production,
plausible paradigmatic differences between producers and citizens, and the potential impact of
differing production systems on the welfare-related views of producers.
Preface

1) A version of Chapter 2 has been published: Spooner, J., Schuppli, C.A. and Fraser, D. (2012). Attitudes of Canadian beef producers toward animal welfare. *Animal Welfare*, 21: 273-283. This paper was co-authored by C.A. Schuppli and D. Fraser. Co-authors Schuppli and Fraser conceived of the research program. Cathy Schuppli and I operationalized the qualitative design and co-created the schedule of interview questions. Cathy also reviewed the written manuscript immediately prior to submission. David Fraser, who acted in the role of a typical thesis supervisor, was involved throughout the research process including manuscript edits. I led all research interviews, conducted all analysis of the data, and was responsible for manuscript composition.

2) A version of Chapter 3 has been submitted for publication (November, 2012): Spooner, J., Schuppli, C.A. and Fraser, D. Attitudes of Canadian pig producers toward animal welfare. This paper was co-authored by C.A. Schuppli and D. Fraser. Co-authors Schuppli and Fraser conceived of the research program. Cathy Schuppli and I operationalized the qualitative design and co-created the schedule of interview questions. Cathy also reviewed the written manuscript immediately prior to submission. David Fraser, who acted in the role of a typical thesis supervisor, was involved throughout the research process including manuscript edits. Members of my supervisory committee provided critical reviews of the manuscript immediately prior to submission. I led all research interviews, conducted all analysis of the data, and was responsible for manuscript composition.

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4) All research and associated methods were approved by the University of British Columbia Research Ethics Board (Certificate: B06-0595)

5) The remainder of the material in the dissertation represents the original, unpublished and independent work of the student (Jeffrey M. Spooner) with editorial assistance from C.A. Schuppli, D. Fraser and members of my supervisory committee.
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Dedication

For Margaret, Frederick and Leslie
Chapter 1: Introduction

1.1 Historical context

Differing opinions on the “proper” treatment of animals date to at least 6th Century Greece (Preece, 2002; Fraser, 2008a; Shevelow, 2008). Significant cultural developments, however, which emerged in the early 20th century (Woods, 2012) and markedly intensified after World War II in Western Europe and North America, brought opposing views into sharp contrast. According to Fraser (2003), the emergence of quasi-industrial, indoor farm-animal rearing methods, advances in scientific knowledge about animals, widespread urban pet ownership, media-driven exposure to the lives of wild animals and a growing distrust of industrialization and technology contributed to or reinforced increasingly distinct positions on animal well-being. In one of the most notable developments, British citizen Ruth Harrison’s Animal Machines: The New Factory Farming Industry “raised the lid on ‘factory farming’ in the UK (and much of the rest of the world)” (van de Weerd & Sandilands, 2008, p. 410). From that point forward, while subsequently fuelled by additional high profile publications from philosophers Singer (1975) and Regan (2004), Western nations have evinced an ever-intensifying public interest in the well-being of food animals.

Commensurate with this increased interest has been a virtual explosion of policies, programs and legislative initiatives – governmental, intergovernmental and corporate – pertaining to the humane rearing and handling of food animals. Internationally, for example, “it is now quite a rarity for a country to have absolutely no coverage of animal welfare requirements within their
laws” (Brown, 2013, p. 137). At the intergovernmental level, in 2005, the (then) 167 member nations of the World Organization for Animal Health [OIE] agreed to – and continue to – develop new global standards for farm animal welfare (OIE, 2013a). Moreover, major corporations like McDonald’s and Burger King now require certain animal welfare safeguards as conditions for purchasing animal products in Canada and many other countries.

“Animal welfare”, however, is a complex term. In fact, according to Swanson et al. (2011), attempts to operationally define or assess animal welfare represent a “wicked problem” (i.e., “a problem characterized by ambiguity and vagueness … and by the lack of any clear standard for determining what solves or answers the problem” (p. 2112)). In order to appreciate some of the ambiguities involved, it is useful to examine a variety of contemporary views about animal welfare.

1.2 Definitions of animal welfare

Until quite recently, personally held definitions about “animal welfare” – certainly beyond the European Union – have rarely been sought through formal research. Still, many individuals and some organizations having made influential contributions to the field of animal welfare science, have voiced their own positions over the decades. In turn, animal welfare scientist David Fraser has invested considerable efforts in attempting to characterize those viewpoints.

1.2.1 Fraser’s “three broad approaches”

In describing one of the central intents of his 2008 text, Understanding Animal Welfare: The Science in its Cultural Context, Fraser writes “my goal (in this discussion and throughout this
book) is not to determine the philosophical essence of the concept of animal welfare, but to identify what people try to capture by the term when they, for example, try to improve animal welfare conditions on their farms and zoos, create animal welfare standards, or include animal welfare in corporate policies” (p. 234). As a result of numerous individual and co-authored works over time (e.g., Fraser et al., 2007), Fraser’s “three broad approaches … are almost canonised [sic] in the science of animal health and welfare” (Lerner, 2008, p. 44).

Fraser proposes what he describes as three divergent views – or “schools” – that he believes most succinctly characterize contemporary definitions of what most people intend by “good” lives for farm animals. Specifically,

(1) that animals should lead natural lives through the development and use of their natural adaptations and capabilities (i.e., welfare-related concerns that entail access to environmental elements such as sunshine and fresh air, as well as opportunities to perform natural behaviour and to develop innate capabilities (Fraser 2008a, pp. 69-70))
(2) that animals should feel well by being free from prolonged and intense fear, pain, and other negative states, and by experiencing normal pleasures (i.e., criteria that may be grouped under the rubric of “affective” entailing emotions and other feelings that are experienced as either pleasant or unpleasant rather than hedonically neutral (Fraser, 2008a, p. 69)) and (3) that animals should function well, in the sense of satisfactory health, growth and normal functioning of physiological and behavioural systems (Fraser, et al., 1997, p. 187).

As an important caveat he maintains that individuals do not typically favour one dimension (e.g., biological functioning) to the exclusion of both others (e.g., natural living and affective states). Nevertheless, he does suggest that people appear to inherently champion one perspective while embracing either of the others in relatively instrumental or supportive ways (Fraser, 2003). And while Fraser stresses that these three issues “do not necessarily exhaust the possible concerns that people may have about the welfare of animals” (acknowledging consideration of animal
autonomy and perhaps integrity) (2008a, p. 71), it is clear that his tri-partite conceptualization captures the majority of concerns that arise over the quality of life of animals.

1.2.2 Definitions of animal welfare beyond Fraser

Beyond Fraser, other “broad” conceptions have been formulated; specifically, “The Five Freedoms” and the “OIE’s” definition of animal welfare. And while both represent by-products of extensively negotiated, multi-national exchanges, both clearly reflect Fraser’s “Biological/Natural/Affective” elements.

1.2.2.1 The Five Freedoms

Originating with the Brambell Report (1965) (reporting the results of a UK government committee established to investigate animal welfare kept in intensive livestock systems), and undergoing major revisions since, the “Five Freedoms” – encompassing freedom from hunger and thirst, discomfort, pain/injury/disease, fear and distress, and the freedom to express normal behaviour – represent the Farm Animal Welfare Council of the United Kingdom’s basic philosophy regarding animal welfare (FAWCUK, 1992). Epitomizing more idealistic than requisite standards for acceptable welfare, they have also been “adopted as guiding principles for animal welfare by a wide range of other bodies with diverse membership” (Fraser 2008a, p. 233). For many people, observes Fisher (2009), the Five Freedoms “capture the essence of, and therefore, arguably also define, animal welfare” (p. 71).
1.2.2.2 Welfare standards of the World Organisation for Animal Health (OIE)

The World Organisation for Animal Health (OIE) was founded in 1924 in an international attempt to “fight animal diseases at a global level”. Since 2005, the 178 member nations have adopted eight animal welfare standards including standards for the transport of animals, slaughter and culling for disease control, and the welfare of farmed fish (OIE, 2013a). In its introduction to the animal welfare chapter of its Terrestrial Animal Health Code, the OIE prescribes that:

“Animal welfare means how an animal is coping with the conditions in which it lives. An animal is in a good state of welfare if (as indicated by scientific evidence) it is healthy, comfortable, well nourished, safe, able to express innate behaviour, and if it is not suffering from unpleasant states such as pain, fear, and distress. Good animal welfare requires disease prevention and appropriate veterinary treatment, shelter, management and nutrition, humane handling and humane slaughter or killing.” (2013b)

1.2.3 Animal welfare scientists on “animal welfare”

Individual positions on what rightfully constitutes “animal welfare” vary considerably (Stafleu, Grommers & Vorstenbosch, 1996; Hewson, 2003; Carenzi & Verga, 2009; Lerner, 2008; Fisher, 2009). According to Szucs et al. (2006) the views of most welfare scientists may be grouped into one of four categories: descriptive types of definitions, definitions referring to an animal being in harmony with its environment, definitions referring to adaptation to or control of the environment by the animals, or definitions concerned with the subjective experience of the animal (p. 218). Using slightly more specific terminology, Nordenfelt (2006) groups existing scientific views on animal welfare under the categories of biological, feelings of well-being, fulfilment of needs/preferences/wants, natural behaviour, complex concepts, and animal health and welfare (pp. 52-53). As is the case above and elsewhere most individual views of animal
welfare may be conveniently grouped under Fraser’s original three. This is certainly so among many notable animal welfare scientists, as follows.

1.2.3.1 “Affective” Champions

Included among those oft cited examples of what Szucs et al. (2006) would classify as “definitions concerned with the subjective experience of the animal”, is Canadian animal welfare scientist, Ian Duncan. According to Duncan (1996) “animal welfare is all to do with feelings” (p. 34). In Duncan’s opinion, experimental efforts intended to accumulate indirect evidence about animals’ subjective feelings “should be our ultimate aim” (Duncan & Dawkins, 1983, p. 13). Moreover, “our thesis is that animal welfare is dependent solely on the mental, psychological, and cognitive needs of the animals concerned” (Duncan & Petherick, 1991, p. 5017). In short, Duncan has consistently maintained his allegiance to a “concept of welfare based on feelings” (2004). According to Hewson (2003), Duncan considers that, “if an animal feels well, it is faring well” (p. 496).

1.2.3.2 “Biological” Champions

In the same way that some animal welfare scientists such as Duncan espouse an exclusively “feelings” based definition of welfare, there are those such as [the late] swine and poultry stress physiologist, John Barnett, who embrace a view based on “health and functioning” instead. Barnett et al. (2001) adopted what they called the “homeostasis” (biological functioning based approach) in assessing animal welfare which contains “widely accepted criteria of poor welfare such as health, immunology, injuries, growth rate, and nitrogen balance” (p. 3). “As a research tool … risks to welfare are assessed on the basis of relative changes in biological (behavioural
and physiological) responses and corresponding decreases in fitness” (2001, p. 3). Other notables who personally regard biological functioning as representing the “true” definition of animal welfare include animal scientist, John McGlone (e.g., “I suggest that an animal is in a state of poor welfare only when physiological systems are disturbed to the point that survival or reproduction are impaired (1993, p. 28)), eminent veterinary educator David Sainsbury (e.g., “Good health is the birthright of every animal that we rear, whether intensively or otherwise. If it becomes diseased we have failed in our duty to the animal and subjected it to a degree of suffering that cannot be readily estimated” (1986, p. 15)) and Cambridge ethologist, Donald Broom.

Donald Broom is the “the world’s first holder of an academic chair in animal welfare” (Fraser, 2008a, p. 72). He espouses what Szucs et al. (2006) would classify as a “definition referring to adaptation to or control of the environment by the animals” (p. 218). According to Broom, “The welfare of an individual is its state as regards its attempts to cope with its environment (Broom, 1986a)” (1991, p. 4168). “If we consider a man whose life is so difficult during a 3-mo period that he gets sever ulcers, loses his ability to behave in a normal way socially, develops other neurotic behaviour, and succumbs more readily than usual to viral infection, he has survived but his welfare during that period must be considered poor” (1991, p. 4168). For Broom, therefore, welfare is a characteristic of an animal (not something given to it) which will vary from very poor to very good, and can be measured in scientific ways (1991, p. 4168). And while “good growth” for Broom “does not necessarily mean good welfare” (1992, p. 247) and nor does he discount the ability of affective suffering to worsen well-being, both Fraser (2008a, p. 76) and Lerner (p. 55) situate his views under the broad category of basic health and functioning.
1.2.3.3 “Natural Living/Natural behaviour” Champions

Animal welfare scientists aligned with organic production methods such as Susanne Waiblinger and Marthe Kiley-Worthington more typically regard natural behaviour as “key for a life of quality in animals” (Waiblinger et al., 2004, p. 118). According to both, “organic definitions of animal welfare emphasize the importance of naturalness, i.e., animals should be able to express their species-specific natural behaviour by being provided with a natural environment or an environment with key features” (Waiblinger et al., 2004, p. 119). It is Kiley-Worthington’s (1989) view that “neither an individual nor a species can exist independently of its environment; [hence] ecological considerations [that] are concerned with the animals’ or the species’ relationship with the environment…are consequently fundamental to any debate on welfare” (p. 328). Moreover, “the right or ethically acceptable husbandry system for animals is one in which … the animal is showing no evidence of prolonged distress and is able to perform all the behaviour within its repertoire” (Kiley-Worthington, 1989, p. 344). Among other notables who personally regard natural living and/or the ability to express natural behaviour as being of greatest ethical concern include famed Swedish novelist Astrid Lindgren and behavioural biologists, Christopher Barnard and Jane Hurst. It was of utmost importance to Lindgren, for example, that dairy cows receive “at least a temporary reprieve from the floors of barns and the crowded spaces where the poor animals are stored until they die. Let them get to see the sun just once, get away from the murderous roar of the fans. Let them get to breathe fresh air for once, instead of manure gas” (Lindgren, 1985, p. 3). Barnard and Hurst (1996), on another hand, proposed a uniquely evolutionary based, species–oriented definition of welfare. As Fraser describes:
“They linked their analysis to evolutionary theory by arguing that animals have been designed by natural selection not simply to preserve themselves by avoiding stress and hardship, but to ‘expend’ themselves efficiently so as to achieve maximum reproductive success. Spawning Pink Salmon … for example, have been shaped by evolution not to have long, healthy lives but to destroy themselves in the course of procreation. Using such evolutionary thinking, Barnard and Hurst argued that any scientific conception of animal welfare must be based not on longevity, low levels of stress, or other criteria that might seem intuitively reasonable to members of the long-lived human species, but on allowing animals to live and expend themselves in the manner for which they were designed by natural selection” (Fraser 2008a, p. 77).

1.3 Disputes over animal care standards

As is evident, the term “animal welfare” reflects a wide range of animal-related considerations. Perspectives on animal welfare are apt to reflect biological, affective state or more natural emphases (Fraser et al., 1997) or differing “value frameworks” (i.e., reflecting differing worldviews and commensurate convictions or value systems; Brunk et al. 1991). As a result, philosophical disagreements can readily emerge over acceptable definitions of animal well-being. In a classic example, differences over the relative importance of biological health and functioning, in relation to affective state considerations and natural living, led international teams of animal scientists to opposing conclusions about the welfare status of sow gestation stalls (Scientific Veterinary Committee, 1997; Barnett et al., 2001).

Operationally, animal care programs or initiatives – all of which deal with or address “animal welfare” in some way – often impose quite different requirements on production and handling methods. Priorities can be broadly grouped into four categories: (1) those that safeguard basic animal health, (2) those that seek to minimize pain and suffering, (3) those designed to allow natural behaviour, and (4) those that require natural elements in the environment such as fresh air and natural light (Fraser, 2006). Moreover, even programs which attempt to accommodate public
concerns about affective state considerations by minimizing pain, for example, may be criticized for failing to accommodate other issues such as fear, boredom, or hunger. As various standards are implemented, and as contradictions become apparent, confusion and dissatisfaction inevitably ensue (e.g., The Humane Society of United States, 2010; Meatingplace, 2013).

Recently in Canada, for example, in response to prospective plans by an Alberta grocery chain to sell only cage-free animal products (Calgary Herald, 2013), a former Chair of the Canadian Pork Council defended the use of sow stalls on the basis of “animal welfare” by claiming that stalls provide sows with protection from aggressive animals and enable individual feeding regimes (CBC Radio, 2013) In addition, a recent announcement by Canada’s largest quick service restaurant chain to purchase eggs from animals reared more humanely in “enriched systems” (The Globe and Mail, 2012) was met with criticism by animal protectionists over the very use of cages themselves (Vancouver Humane Society, 2012).

While animal welfare programs appear likely to engender disagreements, failing to devise and implement such standards may also be problematic. In particular, the absence of welfare standards is apt to create confusion in the market, pressure to adopt simplistic measures, and the erosion of public trust in food-animal systems (NFAHWC, 2012).

1.4 Seeking agreements through shared values

Clearly, it would be advantageous if stakeholders were able to devise mutually agreeable food animal care policies. Among other benefits, mutual agreements may facilitate the incorporation
of reasonable welfare standards over realistic timelines (i.e., in terms of required technological innovations and potential short-term economic disruptions).

A reasonable approach to adopt in advancing welfare programs may be to devise and implement standards that attempt to reflect a maximum number of shared values among vested stakeholders. In agreement with De Greef et al. (2006), it is preferable that solutions to multi-stakeholder conflicts be based on shared values rather than compromise.

In order to develop standards in this manner efforts must first be made to ascertain existing shared or overlapping values regarding philosophical and operational priorities for animal well-being. Such insights may then contribute to the development of comprehensive welfare assurance programs most apt to attain widespread stakeholder support. Such an approach would also mirror recent initiatives in the European Union.

1.5 EU approaches

Partly in response to widespread outbreaks of food animal illnesses – and the health and social consequences entailed (Knowles et al., 2007; Convery et al., 2005) – animal care and handling standards in Europe have received considerable attention in recent years. Between 1998 and 2006, for example, three multiple-country studies, employing qualitative and quantitative research methods, were undertaken to assess consumer views and concerns about animal welfare (Harper & Henson, 2001; European Commission, 2005; 2007). The 1998 “Consumer Concerns about Animal Welfare and the Impact on Food Choice” project began with small focus group studies which led to in-depth interviews and then representative surveys in 5 EU countries. In
2005 and 2006, Eurobarometer surveys eliciting public opinions about animal welfare were conducted with 53,860 citizens across 25 EU and 4 EU candidate countries. Finally, between 2004 and 2009, 44 institutes and universities, involving 19 predominantly European countries (Welfare Quality Project, 2009a) initiated “the largest ever European research project on animal welfare” (Blokhuis et al., 2010). During the course of the Welfare Quality project [WQP], social scientists elicited public views on animal welfare through 49 focus groups conducted in 7 countries (Miele et al., 2011). In addition, multi-nation studies were conducted with producers and other members of the public culminating in an extensive body of social scientific literature reflecting European values and attitudes about farm animal welfare (Welfare Quality Project, 2009b).

Central among these research findings, and among additional European studies undertaken concurrently and beyond the WQP, were the following. Broadly, these projects demonstrated clear support for Fraser et al.’s (1997) tri-partite depiction of differing value-based concerns about animal welfare. More specifically, it is evident that the views of European producers differ substantially from other citizens in what they consider important for animal welfare. Whereas non-producers generally stress the “naturalness” of animals’ living conditions (te Velde et al., 2002; Lassen et al., 2006; Evans & Miele 2007; Vanhonacker et al., 2008; Ellis et al., 2009), animal producers tend to stress basic health (te Velde et al., 2002; Bock & van Huik, 2007; Vanhonacker et al., 2008). Moreover, producers – in comparison to non-producers – tend to attach less concern to short-term pain associated with invasive practices (Boiven et al., 2007; Vanhonaker et al., 2008). In addition, non-producer support for natural living (Prickett et al., 2010) and relatively minimal producer concern about short-term pain (Phillips et al., 2009;
Wells, 2011) have also since been reported in non-EU studies. Most importantly, on the basis of such findings – and in conjunction with multi-stakeholder engagements between animal scientists and the public (Miele et al., 2011) – coordinators of the WQP managed to achieve a desired goal: the identification of multi-stakeholder, mutually acceptable, farm animal welfare criteria including suitable feeding, housing, health and behavioural considerations complete with commensurately standardized, operational measures for objectively assessing such criteria (Blokhuis et al., 2010).

1.6 Canadian status

In stark contrast to the EU, “the dialogue about animal welfare in Canada has only just begun” (Bradley & MacRae, 2011, p.7). In Canada, efforts to establish publicly agreeable standards of animal care are evolving as a collaborative process among industry and humane movements – and other stakeholders – under the leadership of the National Farm Animal Care Council (NFACC). This process is leading to revised voluntary “Codes of Practice” outlining recommended policies and practices for the care and handling of farm animals in a wide range of sectors. Many Canadian provinces also cite the codes as appropriate standards in provincial animal protection laws. Additionally, several national producer associations also support quality-assurance programs that include elements of animal welfare. Thus Canada has adopted a non-regulatory approach to on-farm production, involving Codes which serve as a basis for education, reform, and quality-assurance programs (Bradley & MacRae, 2011).

Despite important advances made through NFACC (in conjunction with input from various governmental, veterinary, animal protection and producer associations), “significant gaps and
weaknesses” – including the absence of a mechanism to create a national welfare policy – remain (NFAHWC, 2012, p.3). In order to help remedy this situation, Canada’s National Farmed Animal Health and Welfare Council (an advisory body of government and industry experts) has proposed a series of actions intended bring about a comprehensive national farm animal welfare system (NFAHWC, 2012). Central to these proposals is the call for a system that reflects Canadian values as they pertain to farm animal welfare.

To date, little research has been undertaken in Canada capable of facilitating such a recommendation. Despite the emerging national presence of corporate and retail-related welfare programs and policies, extensive efforts have not been made to ascertain Canadian beliefs, values, or attitudes regarding farm animal welfare. A failure to attain such will invariably impede efforts to effectively advance mutually agreeable, multi-stakeholder standards – together with timely scientific research, appropriate assessment measures and trustworthy compliance tools – for farm animal welfare.

Well before the release of the NFAHWC report, the University of British Columbia Animal Welfare Program had initiated a multi-study research project to explore and elicit a wide range of values among some Canadian commercial producers and citizen non-producers (hereafter, “citizens”) regarding farm animal welfare. The objective was to generate an overview of the beliefs, values, and attitudes about farm animal welfare present among different stakeholders in the Canadian public. In contributing to this project, I was reflecting Bradley and MacRae’s (2011) directive that “instead of focusing on disparate stakeholder interests, dialogue might be improved by looking within categories for common motivations and common understandings of
the problem to be addressed” (p. 16). Specifically, my intent was to explore: (i) whether there are deep values, defined in the non-economic sense of cultural ideas about desirable goals and appropriate standards for judging actions (Rokeach, 1973), shared by producers and non-producers of animal products, and if so, (ii) how such shared values might form or contribute to practices that would be supported by both groups.

1.7 Qualitative research methodology

To achieve these objectives, I undertook a multi-study, multi-stakeholder qualitative research project using in-depth interviews. In compliance with UBC research ethics board approval, participants were recruited in accord with a purposive sampling strategy often with the assistance of “key informants” (Hammersley & Atkinson, 2007), members of the UBC animal welfare program, public advertisements and occasionally with the assistance of participants themselves. Between 2008 and 2010, 108 (i.e., 101 plus 7 follow-up) interviews inviting participant perspectives on farm animal welfare were conducted with Canadians residing in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec and Nova Scotia. Participants included 23 commercial beef producers, 20 commercial pig producers and 24 citizens (rural and urban). Interviews were also conducted with 16 dairy producers and 18 producers and members of the public in “other” sectors including animal transportation, bison production and goat production. Results from those interviews, however, are not reported here. Of the 67 interviews conducted with beef, pig and citizen participants, 53 were face-to-face with the remainder conducted by telephone. Interviews, which entailed a semi-structured, open-ended format, were normally co-conducted by two researchers, and were tape-recorded and transcribed verbatim. Informal analysis, based on field notes and discussions among the researchers, began after the
first interview and continued throughout. Some of these conversations led to the introduction, modification or augmentation of interview questions or other forms of elicitation techniques. At one point, a decision was made – in keeping with previously attained participant permission – to re-contact and re-interview seven pig producers in order to invite more detailed commentaries in areas of emerging thematic significance. Participant transcripts were subsequently coded with the use of NVivo software and analysed using a constant comparative method (while supplemented with extensive memoing and diagrammatic representations), until emergent patterns appeared within the data (Knight & Barnett, 2008). These patterns were eventually identified as basic themes and reported in the following chapters. Research results were subsequently submitted for publication and once publicly available were (and will continue to be) forwarded to participants.

1.8 Rationale for the use of qualitative methods
Because of the lack of previous research in Canada, our efforts to ascertain Canadian stakeholder views on farm animal welfare were exploratory in nature. Moreover, given our interest in ascertaining value-based perspectives within broad contexts, while allowing room for the emergence and identification of more narrow, potentially idiosyncratic insights, it was important that participants be given sufficient scope to express their views in broad terms (i.e., not limited to pre-selected options). In agreement with Guba and Lincoln (1994), we fully appreciated that “the etic (outsider) theory brought to bear on an inquiry by an investigator … may have little or no meaning within the emic (insider) view of studies of individuals, groups, societies, or cultures” (p. 106). For this reason it was decided that in-depth interviews, conducted in a face-to-face format that was intended to facilitate rapport and build trust, would be used despite the considerable travel required. In this way, our research approach was appropriate for our intended
purpose. Methodologically, the research most closely resembles what Sandelowski (2000) describes as “qualitative descriptive”; specifically, “an eclectic but reasonable combination of sampling, and data collection, analysis and re-presentation techniques” (Sandelowski, 2000, p. 334).

It is important to comment in advance, however, on the sampling selection process. As is typical with qualitative studies, I sought a purposive research sample. Specifically, I hoped to secure representative input from participants comprising a range of citizen and producer stakeholder populations. In the case of the beef and pig sectors, however, I was forced to rely heavily on the voluntary efforts of key recruiters capable and willing to connect me with prospective participants which I would not have managed to interview on my own. As a result, the purposive nature of my recruitment efforts took on an extensive (i.e., beef) versus intensive (i.e., pig) sampling strategy including a diverse, but non-representative sampling of producers engaged in differing specialities within each sector. Moreover, in keeping with efforts to establish and maintain a healthy rapport with producers – most of whom were unfamiliar with the work and interests of animal welfare researchers – demographic enquires were deliberately kept brief and non-invasive (i.e., objective not personal).

1.9 Thesis outline

The intent of this thesis is to contribute findings, insights and recommendations – based on shared values among some Canadians – representing plausible areas of agreement on farm animal care practices capable of contributing to a comprehensive animal welfare system. The specific contributions are presented as follows.
Chapter 2: Canadian beef producer views on farm animal welfare

Chapter 2 reports the views of 23 individuals directly involved in the rearing and handling of beef cattle in western Canada. Canadian beef ranchers rear animals outdoors or “extensively” on pasture before “finishing” them (i.e., in concentrated feeding operations or “feedlots”) for a few months prior to slaughter. While beef ranching has not been the target of widespread public criticism involving animal care and handling, ranchers engage in potentially controversial management practices including branding, castration and dehorning. Given that little has been reported on beef producer views about farm animal welfare to date, we include a considerable number of participant quotes in the interests of both transparency and edification.

Chapter 3: Canadian pig producer views on farm animal welfare

Whereas beef ranchers have not been subjected to widespread public scrutiny about farm animal welfare, this has not been the case with North American pig producers. Before World War II, most Canadian pig producers reared their animals extensively. After the war, pig production increasingly became an indoor, intensive industry. Over the last few decades, public opposition to the “factory farming” of pigs has generated considerable criticism in the USA and increasingly in Canada. As with beef producers, however, there has been little written about their views on farm animal welfare. Hence, interviews were undertaken with 20 commercial – mostly intensive – Canadian pig producers. As with the beef findings, efforts were made to faithfully and transparently represent pig producer views by including a number of verbatim comments regarding often publicly criticized practices.
Chapter 4: Canadian citizen views on farm animal welfare

In contrast to both beef and pig producers, some citizens have been vocal in expressing their opposition to contemporary food animal rearing and handling practices. Given their lack of direct engagement with the rearing of farm animals within large-scale, commercial operations, however, I sought a detailed understanding of views about farm animal welfare among some Canadian citizens. In this way, Chapter 4 reports the results of interviews conducted with 24 participants, from six provinces, with an *a priori* interest in farm animal welfare.

Chapter 5: Shared views and policy recommendations

As a result of these interviews with Canadian stakeholders from the beef, pig and public sectors I was able to identify areas of agreement that may be valuable in advancing efforts to facilitate constructive dialogue over suitable farm animal care and handling practices. This chapter also outlines a list of policy recommendations commensurate with those shared or overlapping values. While differences of opinion were clearly found it is hoped that these findings may be used to close gaps and engender a basis upon which to address areas of disagreement in more conciliatory or collaborative ways.

Chapter 6: Conclusions and suggestions for future research

As a conclusion to the thesis, Chapter 6 provides a brief recap of the research, addresses issues of limitations and trustworthiness and lists important contributions to knowledge. As importantly, perhaps, this chapter outlines a series of future research recommendations. These recommendations, which allude to methodological weaknesses in previous studies, build upon
my findings while proposing more efficacious means of eliciting meaningful views on animal welfare.
Chapter 2: Canadian beef producer views on farm animal welfare

2.1 Introduction

The welfare of food-producing animals has become the focus of intense public debate among philosophers, social critics and animal advocates, but the views of animal producers, who have direct experiential knowledge of food animals, have played remarkably little role in the public debate. Recent European research has characterized the views of some European producers, often finding that producers differ substantially from other citizens in what they consider important for animal welfare. Whereas consumers generally stress the “naturalness” of animals’ living conditions (te Velde et al., 2002; Lassen et al., 2006; Vanhonacker et al., 2008; Ellis et al., 2009) animal producers tend to stress basic health (te Velde et al., 2002; Bock & van Huik 2007; Vanhonacker et al., 2008). Of the few inquiries that have focussed specifically on beef cattle producers, most have also been based in Europe (e.g., Wilkie, 2005; Boivin et al., 2007; Kjaernes et al., 2008).

In Canada’s western provinces, where beef production involves a distinctive system involving year-round “cow-calf” production on extensive rangeland combined with grain-based “finishing” in outdoor feedlots, it seems likely that producers might also hold distinctive views on animal welfare. While beef ranching has not been the target of widespread public criticism involving animal care and handling, ranchers typically engage in potentially controversial management practices including branding, castration and dehorning. Our method was to interview beef

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producers directly about their conceptual and operational definitions of “animal welfare”. We hoped to achieve a realistic and nuanced picture of their attitudes, values, and beliefs regarding good or satisfactory lives for animals. Given that little has been reported on beef producer views about farm animal welfare in Canada, we also include a considerable number of verbatim participant comments among our results in the interests of both transparency and edification. In so doing, we hoped to provide policy makers with a fundamental understanding of beef producer attitudes so as both to inform the public debate and to provide constructive input into animal welfare policy.

2.2 Methods

Interviews were conducted with 23 individuals directly involved in the rearing and handling of beef cattle in western Canada. Participants were recruited through a sampling strategy designed to include producers engaged in ranching and feedlot operations in all four western provinces. While there are many small-scale cattle farms in Canada, participants comprised those engaged in cow-calf production on a full-time and/or large-scale basis (i.e., selected from among the 39% of Canadian ranchers rearing 81% of cattle for domestic and international consumption; Canadian Beef, 2013). Prospective participants were identified by several recruiting assistants and “key informants” (Hammersley & Atkinson, 2007) knowledgeable about the industry, and through provincial farm animal care associations, members of the University of British Columbia Animal Welfare Program, and directly by the researchers.
Because no major differences in views were observed between cow-calf ranchers and feedlot operators, the two groups were collectively termed “beef producers” in the analysis.

2.2.1 Participant information

The 23 participants included 1 to 8 from each of British Columbia, Alberta, Saskatchewan and Manitoba. Seventeen were cow-calf ranchers, operating ranches with breeding females and producing young animals to be finished by feedlots or in one case by themselves. One participant was recently retired, two described their operations as organic, and one described her operation as certified by the Society for the Prevention of Cruelty to Animals. Five other participants managed or owned feedlots (where cattle are confined outdoors and fed high-energy rations until slaughter) and one managed a conglomerate of cow-calf producers. The number of cattle under the care of the participants ranged from 75 to 7 400 cows among cow-calf ranchers (mean of 1 018) and 7 000 to 24 000 among feedlot operators (mean of 11 375). In 22 of the 23 cases, participants were at least second-generation producers. All but one participant raised or managed cattle on a full-time basis.

2.2.2 Interviews

Interviews, which lasted 1 to 2 hours, were conducted “face-to-face” (20), by telephone (2), or by a combination of face-to-face and telephone (1). Immediately before each interview, participants were given a verbal summary of the study and were asked to review and sign a consent form, approved by the University of British Columbia Research Ethics Board, stressing confidentiality and the right to withdraw from the study at their discretion, although none withdrew. Participants were invited to respond to an open-ended, semi-structured interview
schedule that had been pilot-tested by 3 student volunteers involved in farm animal welfare and production. Initial questions covered demographic details, current farm animal operations, personal ranching/production histories, and whether participants ate meat (which all did). All subsequent questions sought the meaning of animal welfare in various ways. Respondents were encouraged to relate what “farm animal welfare” meant to them including any views on animal welfare beyond those specifically involving beef production. Participants were also asked to describe the criteria they might use to assess the welfare of a neighbouring animal production operation similar to their own. At this point, participants were invited to respond to one of three additional textual queries intended to complement the interview elicitation process. The first five participants were presented with a brief “questerview” (i.e., a research tool in which a self-completed, multiple-choice questionnaire is administered within a qualitative interview during which participants are encouraged to discuss their responses in-depth; see Adamson et al., 2004) Theoretically, questerviews are intended to supplement research interviews through the use of a quasi-quantitative (i.e., objective) elicitation technique – in this case, to garner further insights about views on animal welfare. The net utility of the “questerview” in this study, however, was considered marginal and was subsequently discarded. The remainder received either (i) a compilation of 30 welfare-related attributes reflecting the three elements of animal welfare (basic health and functioning, natural living, and affective states as described by Fraser et al., 1997) (7 participants), (ii) a compilation of commonly cited welfare-related practices specifically relevant to beef production (comprising dehorning, branding, castration, forced weaning, unattended calving, stockperson handling, introduction of hormones, exposure to severe weather/possible temperature stress, the ready availability of quality water, and stocking density practices in feedlots) (4 participants) or a combination of both (7 participants). Participants were invited to
address any or all items in the compilations in light of their earlier comments about animal welfare.

Participants were subsequently asked (i) whether they had ever encountered views about welfare that differed from their own, (ii) about their ideas regarding the emotional capabilities of their animals (and the extent to which they may endeavour to accommodate animal emotions), (iii) about any animal welfare-related changes they may have introduced into their operations over their careers, and (iv) about the general nature of the relationship between producers and their animals. In closing, some were also asked whether they would continue ranching in the event of a major financial windfall, and if so, about any changes they might make in their operation with regard to animal welfare. Most respondents answered all questions, usually in the same order. Finally, participants were invited to make any additional comments relevant to animal welfare, and all were invited to contact the researchers to add any supplementary comments afterwards, although no follow-ups were received. All interviews were tape-recorded and transcribed (verbatim) and participants were offered a copy of the transcript if desired (no requests).

Numbers were assigned to each participant and appear with each quotation.

2.3 Results

2.3.1 Animal welfare

When participants were asked to provide their definition of “animal welfare”, most reported that they themselves never used the term. For example, a study participant randomly designated by the research team as number “150” stated:
150: It’s a term that I don’t hear in the rural community …. If I’ve got a group of neighbours helping us with the cattle, nobody talks about animal welfare.

In fact, some participants linked “animal welfare” to concerns raised by those outside the industry to criticize production practices:

262: When that term is mentioned in media or whatever, it almost always seems to be linked to something negative …. When we start talking about ‘animal welfare’ to our city cousins, I’m afraid that they’re thinking that it’s an investigation of something that’s gone wrong.

### 2.3.2 Welfare as “comfort” or “contentment”

Instead of “welfare”, participants decidedly favoured the terms “comfort” or “contentment”, which they treated roughly as equivalent to welfare:

142: I think contentment would be a better term for animals …. The most you can hope for is a contented animal.

140: The basics of animal welfare are that you are handling, managing and treating your animals to the best of your ability, for their personal comfort …. Give them every opportunity to be comfortable.

118: To me it means are you doing everything you possibly can to make life as comfortable and meaningful to the animals that you’re in charge of.

Participants were certain that they could visually assess the comfort and contentment of their cattle:
262: Comfortable we definitely can see, and people that are around livestock all the time will know in body language and the way cattle or livestock are acting, as to whether they’re comfortable.

182: If they're not content, it's simple for me to tell. I can tell if an animal's sick or has a temperature or – just by looking.

During free exchanges regarding good lives for their own cattle, many participants volunteered the term “happy animals”. In most cases, “happy” was clearly intended to serve as a synonym for “comfortable” or “contented”. On occasion, it was used to refer to cattle showing play-like behaviour. However, when asked, other participants were adamant that animal “happiness” was not a term they would use:

262: Happy is a term that I don’t know if I’d want to use, because I don’t know if animals get happy. I couldn’t answer that. But, comfortable we definitely can see.

References to “contented” or “happy” animals were frequently used in the context of rumination:

120: Well, the first thing you look at … when you're eyeballing for herd health is that they're relaxed and chewing their cud, and that's an indication of being happy.

182: A cow that's content is laying [sic] there and just chewing her cud and is absolutely, probably, maybe not thinking about anything! That's content! … I honestly think if you measured their brainwaves, there would be nothing there … we spend a lot of money to meditate and do yoga and to try to get to the state that the ruminating cow is already at.

2.3.3 Welfare as natural living

Participants also insisted that a good life for beef cattle requires the opportunity to live in a natural manner:
144: I have a true belief that animals must be able to exhibit their natural behaviours, whatever that is. Pigs root, chickens scratch, cattle graze, sheep browse – right? …. none of them were meant to be in barns.

Supporting this view, one feedlot operator added:

110: If the cattle are on concrete for too long they typically don’t eat as much and they just kind of—they’ll slowly go off feed a little bit … but if they’re in pens that have dirt where they can roam around … and dig a little bit and do whatever, they just seem to be a little happier …. Cattle’s natural environment is outside and they seem to be the happiest there.

Nonetheless, participants acknowledged that nature can be harsh. Animals reared extensively are commonly subjected to predation, injuries, harsh weather, and unattended calvings. And while such adversities were undeniably recognized as potential threats to cattle, exposing one’s animals to them was not regarded as negligent:

182: The livestock here are extremely well taken care of. They live a contented life, for the most part. There could be weather, there could be whatever, but I mean, that's nature. Nature's not pretty necessarily.

120: Some injuries are part of natural living. Bulls break their penises … cows get the odd broken leg.

144: Variable weather conditions: I think that that is a part of humane animal welfare … they get to experience variable weather conditions.

However, participants pointed out various ways in which they sought to offset or prevent natural hardships. Participants cited providing dry bedding during wet weather, safety from persistent
predation, regular access to feed, prevention and treatment of disease, and enhanced genetics in order to lessen complications at birth and thereafter:

116: Animals that are in the wild suffer more pain than … the animals that I look after, because we have a certain amount of supervision over some of the hazards that a wild animal doesn't have … Starvation for deer is something that we go through here in a severe winter, and all natural animals go through that, where myself that's something that we prevent.

126: That beautiful picture of cows all roaming out … isn’t really true …. That storm that we had here 10 days ago – if the farmer wasn’t there looking after those cattle, we’d have massive death loss.

182: [If] we pull the fences and turn these cattle loose they're going to meet an uglier death than they're going to now. A lot of them are.

120: When we buy bulls, we focus on a multitude of things and the first one is easy calving … [Our manager] is … very careful about what he chooses for bulls, so that we don't have calving difficulties. Because how much do your cows weigh? Twelve hundred pounds? They're not very big cows. So we don't buy great big huge bulls, right?

2.3.4 Welfare as basic health and growth

Producers also stressed the importance of animal health, frequently referring to the “body condition” of an animal as the most reliable indicator of physical well-being:

112: Oh, condition, condition. You can see that. Condition of the animal … for me, hair coat is a big indication of an animal's … health and situation.
140: And certainly the body condition factor with the cows is very important. A healthy cow in good condition is going to drop a healthy calf 99 percent of the time and is going to be able to take care of that calf properly. So, I put huge emphasis on cattle condition. One producer linked body condition to “emotional needs”:

126: I don’t know what the emotional needs really are, but if the body condition is good and they look good and they’re healthy, does that go along with emotional needs? I would suggest yeah.

2.3.5 Welfare and steady weight gain

Participants placed preeminent importance on the link between “comfortable” animals and steady, daily growth. A healthy animal, ruminating contentedly and gaining weight at a steady pace, was seen as eventually remunerative. As a result, many participants recited the phrase, “If we look after our animals, they will look after us.” Other perspectives included:

110: Basically to me, ‘farm animal welfare’ is the idea of doing what’s best for the animal … and I guess the economics go along with that as well … If an animal is well fed and healthy, it’s going to remain happy and productive.

146: Bottom line: if there’s no welfare you don't make any money because if you don't have the good welfare we're not getting the gains out of the cattle.

260: We look after our animals because we like them and we want to do it properly, but when it comes right down to it, if you don’t, then it’s your loss.
2.3.6 Stress

The antithesis of good welfare and steady weight gain was seen as anything that interrupted or impeded the growth process or resulted in weight loss. The term most frequently used for such impediments was “stress”. Some participants used “stress” specifically for failures to accommodate the biological needs of an animal by failing to provide feed, water or protection:

144: Well, a happy animal is an animal that … is not stressed by a limited essential resource, such as food or water … is given all the abilities to maintain health …. They are not unduly subjected to the stress of parasites and they are not subjected to stress of movement.

Others used the term to refer to the emotional state of animals facing adversity:

254: The number one thing is quiet and calm …. [since] stress on an animal is huge ….

So I mean, we do the best we can to keep that stress to a minimum in our operations. Stress in a maturing beef animal was believed to impede its steady rate of growth. As a result, stress was seen to entail a “lose-lose-lose” scenario: loss to the animals, to the rancher and ultimately to the industry as a whole. Producers, therefore, emphasized the need to reduce or minimize stress where possible:

140: Today, everything you do with an animal is related to how you’re going to stress that animal, and you can relate that to how many dollars you’re going to end up getting ….. A stressed animal is not growing. If you want to look at the total logic of it, a stressed animal is not making you money.

Stressors were generally grouped into two categories: avoidable stressors such as poor handling, and unavoidable stressors that are required in the contemporary rearing of beef cattle.
2.3.6.1 Avoidable stress

Many participants indicated that they adopted “low-stress handling”, commonly citing well-known advocates such as “Bud” Williams (Williams, 2011)

248: A guy called Bud Williams … gave lots of talks on it and how the cattle can be actually moved much easier and more efficiently with certain techniques, and it also improves their health. And I think that's caught on a lot.

144: The policy is that every person that handles animals here [on farm] takes a low-stress cattle handling clinic, approved by the management of the farm.

Other participants emphasized well-designed handling equipment:

172: You can have the best people in the world, but if you've got a really badly designed system it's going to be stressful on cattle and it's going to be stressful on the people. If you've got a good system, even with people that are not so well trained, it's still workable.

Hence, participants widely maintained that knowledge and use of low-stress handling methods represented a way to minimize avoidable stress.

2.3.6.2 Unavoidable stress

Participants also saw certain stressors as unavoidable and often routine. In the vast majority of cases, producers described actions such as castration, branding and dehorning as regrettable but unavoidable. Most of these practices were seen as necessary to meet regulatory requirements or management and safety concerns. For example, hot-iron branding – the traditional practice used to identify animals – was acknowledged as painful, but necessary for regulatory purposes:

134: We … brand our cows … for identification reasons. And we don’t like the idea of branding.
140: Branding is an issue that the public sees as hurting to an animal, which I agree, it is. It hurts.

Some participants spoke of ways to reduce the stress of branding by using cold-temperature “freeze” branding, and to reduce the pain of castration by using tight rubber rings (“elastrators”) rather than surgical castration:

168: The old argument though comes to how to actually castrate them: the elastrator seems to be the one that’s the least painful, I would think.

Others who favoured surgical castration, nonetheless acknowledged the disagreeable elements involved:

254: Straight castration, to me, is the only way to go ... but ... it's a hard one to defend, because it is one of those things. But you can't get away from castration. You can't put a big herd out with bull calves.

Dehorning (removal of horns or horn buds of young cattle) was seen as necessary to prevent injury to human handlers and other animals:

168: And the horns, they’re not useful for anything other than gouging another animal or killing the person who’s handling them …. I would never want to put … our cattle out with an animal with horns.

Again, some participants emphasized better handling to reduce stress associated with the procedure:

254: The big thing is … to get them in the chute, you nip their horns and you let them out. You don't let them stress and strain.

Similarly, vaccinations were seen as stressful but necessary for animal health:
There’s a lot of people that don’t like to put their own child through the pain of having a vaccination, and yet we do it … It is stressful for them, for sure.

Again, the emphasis was placed on reducing stress as much as possible:

If necessary, they’ve got to be given their vaccinations, de-horned, castrated, but in as least stressful way as possible, I guess.

Forced weaning of calves from their dams was also recognized as stressful but necessary:

I mean, it's a hell of a thing, the weaning process! …. you take a calf away from a cow, they're having to go on their own, where they've had this mum beside them for the last six or seven months. It's a hell of an adjustment for them.

Other participants noted that castration is needed to avoid other animal welfare problems including “riding” (sexual mounting) of other animals and out-of-season calving:

‘Why do you castrate?’ …. to me it’s more inhumane to have all them bull calves riding each other.

They can’t stay with a herd as bulls. Safety, mismanagement, the breeding practices, heifers, it just – it cannot happen. So, castration is an absolutely necessary management tool.

2.3.7 Different views or reactions to pain

There was agreement among participants that invasive procedures invariably cause some pain or stress, yet participants differed in the level of importance they attached to the issue. Some participants put emphasis on minimizing pain as much as possible:

We have a really good crew – very quick. Most calves are down less than a minute …. it's really important to me and my family. What's in it for us to hurt them any more
than necessary? It's an awful thing PR [public relations] -wise for the beef industry, but I don't know how you get around it ... I mean, if you give me a better way, I'll do it.

Other participants tended to down-play if not dismiss the importance of pain from invasive procedures with phrases like, “It doesn’t hurt for long” or “We can see that it didn’t hurt much because everything is fine again,” or “Do it young and they don’t even remember.” Others considered that the stress associated with the restraint involved was more significant than the pain caused by the procedure:

156: We, um, generally ring our calves young ... they bawl for about two seconds … because you’ve got a hold of them, and they’re scared. And then after that, they’re fine.

None of the participants reported using pain medications for invasive procedures. Some implied that restraining the animal for the time required for local anaesthetic to take effect is stressful for the animals, and at least one objected to the use of anaesthetics on the basis of the drug itself causing pain:

168: We’ve talked to [our vet] about using anaesthetic. He suggests no, because anaesthetic burns. It’s a very sensitive burning when it goes in. And he says it’s not highly recommended, especially when you’re doing young stock.

### 2.3.8 Welfare concerns raised by participants

When asked to identify their own concerns regarding animal welfare, participants alluded to various practices that they saw as avoidable and hence as objectionable for both animal care and economic reasons. In seemingly ascending order of importance, these were (i) failure to upgrade potentially poor handling facilities such as slippery floors, (ii) over-stocking of pens in feedlots, (iii) hasty or arbitrary use of electrical cow prods to load or move animals, (iv) failure to provide
suitable shelter or windbreaks during harsh weather, (v) failure to maintain good health through vaccination and prompt treatment of illness or injury, (vi) failure to provide adequate nutrition throughout the year and/or sufficient fresh water in summer, (vii) rough handling (“cowboying”) or harassment, and (viii) allowing unskilled people to conduct invasive management procedures such as castration.

There were also major concerns about small-scale, part time producers whom participants referred to as “hobby farmers”:

168: There are a lot of people out there that think they can … turn a quick buck, or [reduce] their farm taxes by having a handful of animals …. And they don’t have the time, or the knowledge, or the want-to to ask for help. And you see an awful lot of animals that are abused or not treated fairly.

Participants cited a lack of knowledge among “hobby farmers” as a common cause of animal welfare problems, alleging that more than half of the complaints received by the industry were related to hobbyists:

254: Where we’ve found the bulk of the problem – and maybe where some of the issues come is – people don't know what the hell they're doing. You get a lot of your – and I don't mean to knock them – but a lot of your smaller [operators] that have just a handful [of animals].

One participant claimed that hobby farmers lack confidence in handling animals: “They're scared to de-horn them, they're scared to do this, they're scared to do that, and they don't do the job properly.” Another complained about lack of commitment by small-scale producers who “don't attend meetings and who don't read.” Another alleged that part-time producers would leave animals unattended for unacceptably long periods while pursuing off-farm activities. Finally,
hobbyists were also accused of practicing what some considered among the worst type of animal abuse possible – namely, keeping animals in isolated pens and thus failing to accommodate basic social and behavioural needs – a concern that participants extended beyond cattle to include individually penned horses and even house-bound dogs.

Some participants also expressed dissatisfaction with inadequate levels of animal care provided by neighbouring commercial producers, and there was universal concern about “wrecks” – ranch operations that failed to provide even minimal animal care likely because of personal or family difficulties.

2.3.9 Controversies

The interviews also identified areas of disagreement among producers. Participants disagreed about the appropriate age and methods of castration and dehorning. Some participants were very critical of those who delayed the dehorning of calves:

150: If it’s not done young, the dehorning, then it’s a terrible job.

And also of delaying castration until late autumn:

134: Years ago … somebody persuaded us that we should wait [before castrating] and we’d get better growth …. It was late fall. That was not a good day. It wasn’t a good scene. But there’s people that do [that] all the time.

Moreover, annual calving dates varied considerably among ranches, ranging from January (winter) through May (spring). In almost all cases, non-organic ranchers – regardless of their own calving season – did not voice welfare-related concerns about winter calving. Organic participants, however, plus one non-organic producer, emphasized the welfare and management-
related benefits of spring calving. One noted that calving in May occurs when, “the weather is warm, so it's a lot more conducive to animals that are born with a summer coat”, and that predators such as coyotes have abundant food from small mammals and are less likely to attack calves. This participant noted: “The only reason that cows calve in January, is because economically … you want the largest possible calf within that year. And the best way to do that is to have them born December 31st. But usually it's twenty-five or thirty below with a howling wind and a snowdrift …”. Another claimed that the process of parturition is easier in the spring:

156: Cows have way less trouble calving when the weather’s nice … they’re moving around so their muscles are working. They’re not putting all their energy into huddling and being warm, so they’re loose.

In addition to differences in views about parturition, organic and non-organic producers were critical at times of alleged practices of the other. One non-organic producer considered that organic regulations have the potential to foster poor animal welfare:

260: When we have a sick animal, we give it an injection. We give it penicillin or some other form of antibiotic. We treat it. If you’re in the organic business, if your animal’s sick and you treat it, you have to pull it out of the organic stream.

However, organic producers reported that they would not withhold antibiotics from sick animals even if this required that the animals be marketed as non-organic. One noted that because they cannot vaccinate cattle, they are especially motivated to reduce stress in animals in order to prevent disease.

For all producers, differences also surfaced on how long (if at all) cattle should be “finished” on a grain-based diet. According to one cow-calf producer:
They push cattle to extremes in feedlots that they were never designed to do. A ruminant wasn't designed to eat grain.

Cattle auctions, where animals are bought and sold, also proved controversial. One participant complained:

The system we have of the auction markets is … a terribly inefficient system. It causes tremendous stress, disease.

One participant expressed enthusiasm for the growing movement toward computer-mediated sales to avoid the use of auction markets. Another claimed that the stress of handling and detaining animals at auction markets is a common cause of disease.

However, another participant saw progress at auctions:

I think the auction yards are getting better. At one time, I mean, they just didn't care. They'd have their little old whips and want to move them through as quick as possible and things like that. But, you know, the industry's putting pressure on the auction yards to have their employees somewhat experienced with low-stress handling.

There also appeared to be personal differences over appropriate levels of care, especially among cow-calf producers, and over how much self-sacrifice is appropriate for the sake of one’s cattle. One participant made reference to “spoiling” animals, comparing excessive attention to cattle with “using six coats of paint” where two would suffice. In contrast, other producers had opted to completely eliminate electric stock prods, while one used a topical cream to facilitate healing and lessen pain in hot-iron branding. One participant attached great importance to checking animals every two hours during nights in calving season in order to prevent animal suffering:

What if that cow has a problem? She lays [sic] there all damned night with a backwards calf or a calf with a foot back. So it's not the point that you lost the calf. It's
not the point that maybe you’ve got a downer cow for a week. The point is, that animal suffered all bloody night because of your management practices. I can't justify that.

Others acknowledged limits on their degree of attention:

128: I love calving season. I love the baby calves. You know, we work our butt off so that they don't freeze when it's thirty below. But there are also times when we're both exhausted, falling into bed at eleven, that neither one of us can get up at three.

Finally there were controversies over the circumstances that require veterinary interventions, with one producer accusing others of saving money by forgoing veterinarian visits altogether.

### 2.3.10 Economic constraints

Although good welfare was seen as necessary for productivity, economic constraints were also recognized. Some participants emphasized that very slim profit margins constrained their ability to provide amenities for their animals:

110: If you could make more money raising cattle, the potential would be there to maybe go out in your pens and build the odd little shelter for them in the event of a storm … just to put your mind at ease that your cattle are a little bit happier. But the reality is that the economics aren’t there and so you have to just do the best with what you have.

Participants were unanimous in emphasizing that market and other financial forces had important effects on beef production practices and the industry in general:

110: Agriculture producers in this country have had very slim margins since the early 80’s, so we’re going on close to thirty years now and there’s getting to be fewer and fewer producers out there because I think the majority of them won’t compromise animal welfare just to try to get a breakeven out of it, so they’re getting right out of the industry.
At the same time, producers stressed that economic challenges did not undermine animal welfare:

248: We'd try to do everything as efficiently as possible and … properly handled cattle will reward you as much as anything will. There is no way that we can try and squeeze a few extra dollars out … of the animals, by shortening them on feed or anything like that, or rushing them through to somewhere.

128: We're not going to abuse our animals because financially it doesn't make sense either .... this is our livelihood, and our bottom line falls if we were not taking care of these animals.

140: I have relied on my veterinarian to give me a herd health care program that is protecting my herd. But in doing that, it’s protecting my bottom line. So, it may be a little selfish in a way in that I’m protecting my livelihood by keeping my animals healthy. It also is an animal welfare benefit because healthy animals are happy animals.

168: Why would you mistreat your animal … why do that to one of your own assets in your business?

Whereas participants equated animal welfare with low stress, contentment, steady gains and good health that would improve production, they saw consumer concerns over animal welfare as relating to issues that would increase costs. Nonetheless, they were willing to incur such costs as long as consumers paid. According to one feedlot operator, he was willing to provide “grass-fed finished, non-hormonal or traceable product” if desired:

110: If people are willing to pay more for that stuff, you know, power to them. That’s great.
126: So we’ll do whatever they want us to do, but they got to pay for it. And if it’s profitable to do it, I’ll do it, as long as I’m not abusing the animals.

130: If people want to buy it, well, why not go for it? You know, hey, if people will pay a premium, if the public says, ‘This is what we want,’ then pony up.

2.3.11  Concern over external pressures

At times, participants were critical of what they regarded as unfounded or mis-directed public concerns regarding animal welfare. One participant blamed criticism of ranching practices on “too much humanizing of animals and using human values when addressing issues for animals,” noting that:

260: Some animals are actually better, especially in our environment, to be outside, rather than being stuck in a barn or in a sheltered place all winter where they could be confined, or in a place where it might end up being damp. And, yet that might look better or it might make people feel better, but that’s not necessarily the right thing for the animals. Another agreed:

182: People would think cattle standing here in a howling blizzard are probably in a great deal of discomfort. But generally, they're … okay. They don't want to come in the house. In some cases, laws motivated by animal welfare concerns were viewed as actually contrary to animal welfare. In particular, regulations requiring cattle to be unloaded and rested during long journeys were widely seen as bad for the animals:

130: The stress of unloading, being offered rest time and then coming back on [the truck], I really have to ask is that more stressful than just the extra hour or two or three or four.
There’s no doubt, it is stressful getting the animals onto the truck, but it isn’t serving any good purpose to take those animals off a truck, trying to get them to water in a strange place, then get them back on the truck …. It actually will be harming the animals more.

The U.S. abolition of horse slaughter was seen in a similar light:

Down in the States where organizations like PETA and stuff have … convinced the government down there to not slaughter horses, animal welfare has definitely been compromised by that, being that now horses are not being fed because producers cannot afford to feed them and they’re just letting them run free in the wild to be either starved to death or be killed by natural predators or have traffic on the highway hit them …. Maybe some people’s hearts were in the right place but their minds weren’t.

2.3.12 Other values

Beyond views about animal welfare, participants also provided insights into other values.

2.3.12.1 Enjoyment/appreciation of animals

In response to the question, “What do you enjoy about being a producer?” a majority of participants replied either “working with animals” or being “around cattle”:

If you’re involved in production, you’re there for a reason because you like animals. There isn’t anybody that works here that doesn’t like animals because they could make a lot more money anywhere else …. It’s because that’s what they like to do.

I really like working with cattle. Financially there's very little satisfaction, at the moment …. It's almost therapeutic for me to go work cattle or move cattle.
134: We just had two baby calves this morning. And I … feel sorry for some of these people in the urban communities that can never appreciate the birth of a … little calf or anything, and appreciate it and then watch it grow.

Participants also described appreciating idiosyncrasies in their animals:

150: You’ll watch say ten cows come down to that [water] bowl. The boss cow gets to drink first. Of that ten, there’ll be two that’ll say, ‘Ah, the hell with this,’ and they’ll go down into the mud. Eight will say, ‘We’ll stand back and we’ll wait – we’ll wait here.’ So, they’re just like people. It’s just fascinating for me to watch the comfort level of who they like to be with.

262: We’ve hired some people that had no livestock experience whatsoever …. And once they start understanding cattle, they seem to have, you know, more respect for them, watching behaviour and understanding what some of these things that they’re doing means.

2.3.12.2 Lifestyle

Many participants stressed that despite economic challenges they would continue raising cattle even in the event of a significant lottery win or major inheritance. Central to this decision was the enjoyment of the “lifestyle” associated with ranching:

126: You wouldn’t be doing that for the money because there hasn’t been enough money in agriculture to do it for the money. I don’t think there are people in this business for the money. So what drives them then? It’s the lifestyle. You’re raising your kids on it. Well, what else is it? Well, it’s looking after animals. That’s why we’re here.
We could all go work for wages on the oil industry for far more money than we are making now. And that’s what it comes down to: we want to do this because we love the lifestyle.

2.3.12.3 Tradition

While valuing the traditions of cattle ranching, participants showed no widespread resistance to replacing traditional methods with more modern approaches. In fact, proponents of low-stress handling occasionally pointed out that low-stress methods have always been part of the ranching tradition:

You don’t yell at cows unless you have to … that was a pat rule in 1890. If you were trailing cattle up here, and you yelled at a cow, you went and picked up your pay. They knew lots about handling cattle that most people now don’t.

Some participants expressed support for “branding parties” when ranchers would cooperate over branding and other management practices. One participant who expressed ambivalence over branding and recognized that technology would likely make branding obsolete, still noted:

It’s going to be very tough, though, because that’s how we’ve always done it. That’s the West. Branding is just part of it.

Another participant explained that even some proponents of low-stress handling still attended traditional brandings because, “it’s sort of like we’re back in the old West.”

2.3.12.4 Beliefs about cattle as sources of food

Several participants were also clear that they did not regard cattle as “pets”:

We don’t consider them pets. We know them … occasionally there’s some that have names … but, they aren’t pets … we have a different relationship with our horses, for sure, and with our dogs, for sure. But, the cattle, it’s a business and they aren’t pets.
146: I don’t have a relationship with them. You buy them, put them in, you feed them, and then you ship them. I certainly have to take care of them because if I don't they die, or they don't gain as well or anything else, so their needs have to be met, but as far as being pets, no.

Upon probing, participants often made reference to the role of “growing up” on ranches or farms and participating in “4-H” programs (see Discussion) which, among other activities, teach animal care and handling to rural children. Many believed that this helped ready them to understand, and eventually accept, the place of food animals:

260: The very closest we get is with 4-H animals … and that’s where you really do your petting. You do your grooming and everything, and you go through the stresses of the animal parting. And, there’s been tears shed, for sure, but everyone gets over it … they have to.

262: I guess it’s a lot easier for somebody that grew up on the farm and seen those things …. where you raised livestock and you slaughtered them right on the farm, to put food in the freezer …. You see that growing up; it’s a lot easier.

Moreover, while participants obviously supported the rearing of food animals for human consumption and producer income, such support was contingent upon the provision of diligent care:

182: The livestock here are extremely well taken care of …. but their end result is to feed me or other people and that's how we make a living.

156: I had to explain this to a ten-year-old vegetarian girl. She said, ‘Why, if you love animals, do you eat meat?’ And I explained to her, … ‘My animals have a good life. They get to live like we could only dream. They don’t have to work. They just eat, drink,
raise their babies, hang out with their friends, and then one day, it’s done …. We are thankful for them. We take good care of them. And that’s why God put them on earth.’

2.3.12.5 Contributions to society

Participants also emphasized the broader, social contributions that they made, especially as food producers:

112: I'm a food producer for gosh sakes. It's the most essential thing. You can do without a car, a skidoo, a four-car garage, a swimming pool, a sauna! But you got to have food!

116: From my perspective animal production is production of food to sustain our population …. food production is where I'm coming from.

Some participants also stressed the contribution that ranching makes to the preservation of wildlife and the environment. One considered that, “large tracts of privately held land are the last great hope for wildlife”, because parks are too heavily used by people for large predators to thrive. Another noted the importance of preventing manure from harming waterways. Another described his attempts to re-establish native wild grasses. Others saw their primary role as managing natural grasslands and regarded successful cattle production as a consequence of good grassland management.

2.4 Discussion

In this qualitative study, our goal was to capture the range of beliefs, values and attitudes on farm animal welfare among commercial ranchers and feedlot operators, and to provide insights, where possible, about the nature of those views. We found a wealth of perspectives, including some areas of agreement as well as some controversy.
Although participants reported not using the term “animal welfare” – and were even wary of it as the language of their critics – the views they expressed represented a comprehensive grasp of animal welfare as it is commonly understood. Most expressions of concern about animal welfare fall into three main categories: biological functioning (satisfactory health, growth and normal functioning of physiological and behavioural systems), affective states (avoidance of pain and suffering, plus positive states such as comfort and contentment), and “natural living” which is variously understood as the ability of animals (i) to perform their natural behaviour and (ii) to live in reasonably “natural” environments (Fraser, 2006). All of these concerns were clearly reflected in the views of participants, apart from a tendency to down-play short-term pain resulting from invasive procedures as discussed below.

An interview-based study of cattle producers (dairy, veal and beef) in six European countries (Kjaernes et al., 2008) identified some clear similarities to, and differences from, our findings. Similar results include an emphasis on animal comfort (Kjaernes et al., 2008, p. 296), on minimizing stress (pp. 300-1), on vigilant, non-artificial efforts to prevent disease in organic operations (pp. 284-5), and on assessing animal welfare through animal health and physical appearance (p. 300). Moreover, as in our study, the act of ruminating was interpreted as a sign that animals are calm, peaceful and possessing good welfare (Kjaernes et al., 2008, p. 300), and cattle were not regarded as pets (p. 295). Overall, producers in both studies contextualized animal welfare within an overarching framework of ‘good animal care, directly engendering good animal performance, directly facilitating positive economic returns’ (Kjaernes et al., 2008, p. 258).
However, European producers, especially cow-calf or “suckling cow” producers, although emphasizing opportunities to express “natural behaviour” (Kjaernes et al., 2008, p. 258), did not place the same emphasis on access to the outdoors that we found among Canadian producers. Although suckling cows in Europe are typically raised on pasture in summer, most are kept indoors in winter (at least partly to protect animals from winter rains) and many fattening cattle are reared indoors on grain-based diets (Kjaernes et al., 2008). Given this tradition, European beef producers may be less likely to see cattle welfare as closely linked to outdoor environments. It is unclear to what extent producers in this study favoured outdoor environments because of personal values versus practical necessity. In any case, Canadian participants placed strong emphasis on protecting animals from extreme natural hardships by such means as wind-breaks and efforts to minimize calving complications, both directly through attending births, and more indirectly through the use of bulls apt to sire low-birth-weight calves resulting in easier calving.

Three other studies have focussed specifically on beef producers. In terms of handling cattle, Boivin et al. (2007) found that French producers recognized that animals’ were sensitive to shouting and responded well to human contact (p. 148); however, one fifth of producers considered cattle relatively insensitive to pain (p. 148). Vanhonacker et al. (2008) and Phillips et al. (2009) found that beef producers from Belgium and Australia (respectively) seemed to accept the relatively short-term pain associated with invasive practices. Similarly, some participants in our study appeared to dismiss or de-emphasize pain associated with invasive management procedures. In some cases, participants expressed concern over such pain but saw painful practices as obligatory and beyond their control. Other participants tended to dismiss the pain as relatively unimportant. Still, others tended to see such pain as an acceptable trade-off to prevent
more serious problems such as injuries caused by intact horns or persistent mounting, aggression, and out-of-season calving caused by uncastrated bulls.

In an ethnographic study of Scottish beef industry workers, Wilkie (2005) examined the contradiction inherent in both providing care and producing “sentient commodities” (p. 213). Drawing on sociological theory, Wilkie discussed varying degrees of attachment and detachment in human-livestock interactions. She identified certain relationships as “concerned attachment”, for example, among breeders adopting a relatively humanized and individualized style of interaction with animals, whereas others were seen as displaying “detached detachment”, for example, among workers in slaughter plants where livestock are perceived more purely as commodities. In our study, many participants seemed to fall along a continuum of “concerned detachment”, with producers expressing concern for animals that stood out individually or during times of vulnerability such as calving, whereas other participants described relationships of a more detached nature.

In this study overall, producers reflected a view of animal care centred on reducing “stress”. Specifically, they saw stress as the antithesis of their goal of calm, contented animals resting, ruminating and making steady weight gains. Stress was not necessarily seen as intrinsically unacceptable. Specifically, stress that resulted from natural environments or that was deemed unavoidable was generally accepted, whereas stress was widely regarded as unacceptable where cattle were not treated according to basic standards of care. Such contextualizing of stress would seem consistent with the need to balance trade-offs and to manage within operational limits.
There was also a strong adherence to low-stress handling. In this vein, participants expressed concern over keeping these relatively flighty animals restrained any longer than necessary. As one participant suggested, this may help explain the lack of interest in local anaesthesia whose use would require longer handling times.

Participants in this study made frequent references to childhood experiences involving “4-H” clubs (standing for Head, Heart, Hands and Health) suggesting that these long-standing programs help to socialize ranch children into the world and values of beef production, including the rearing of cattle for sale and slaughter. Similarly, in an American study, Ellis and Irvine (2010) found that 4-H participants acquire several strategies for dealing with the emotional conflict over the rearing of animals and their eventual slaughter. These were (i) “cognitive emotion”, or redefining feelings for animals to avoid developing attachment, (ii) “distancing”, or regarding livestock as “market animals” bred and born exclusively for market purposes, and (iii) “narrative redemption” associated, for example, with laudable plans for the money earned through sales as well as plans to replace current animals with others in a natural cycle of life (pp. 27-32).

Perhaps in keeping with traditional 4-H training, there were also clear values associated with standards of animal care. Widely shared standards included concerns about over-stocking pens, rough handling, and failure to maintain satisfactory handling facilities, to meet nutritional needs, and attend to sick or injured animals in a timely manner. And without directly criticising organic producers, non-organic producers also emphasized the need for basic health care including vaccinations and therapeutic antibiotics. Taken together, these appeared to constitute a set of fundamental welfare standards shared by the participants.
Participants also had strong views on what they regarded as problems in the industry. Chief among these were Canadian trucking regulations that require offloading and reloading of cattle during long journeys (Maximum legal transit time in Canada is 52 hours.). Although trucking itself is usually regarded as stressful for animals, unloading and reloading at rest stops tended to be seen as unnecessarily stressful and the cause of unnecessary weight loss. Hence, producers would presumably welcome an assessment of federal transport policies and of factors that make long-distance transport necessary in Western Canada.

Participants were also critical of “hobby farming” – a widespread practice in Canada (Boyd, 1998) – specifically that hobbyists lack the requisite skills, knowledge, and appreciation of their role within the food production chain. In doing so, producers were perpetuating a tradition of criticism directed toward hobby farmers by advocates of commercial farming (e.g., Daniels, 1986; Hart, 1992). At the same time, Holloway (2001) outlined an often complex and varied depiction of hobby farmer’s relationships with their livestock whereby animals were frequently reared and regarded more as pets or companions than resources for monetary gain. A systematic examination of professionalism and animal care among part-time producers would likely be welcomed by the Canadian beef industry.

There were areas of disagreement between producers within this study. Organic producers either directly or indirectly expressed welfare concerns over the practice of winter calving. This was not the case with non-organic producers. Hence, winter calving would be a suitable subject for further scientific review or study.
Furthermore, cow-calf producers in particular expressed a strong but variable sense of responsibility to provide care. Some reported being very self-sacrificing while others looked upon extreme personal efforts as “spoiling” animals. Also there were clear differences in the extent to which producers either expressed concern about possible pain/distress inflicted on their animals or the degree to which they appeared to make efforts to limit pain. Hence, it is possible that operative definitions of “comfort” or “contentment” may vary. In some cases, both terms may be used synonymously with basic standards of care. In others, comfort or contentment may include practices that exceed basic standards.

Alternatively, there may be a willingness among some producers to voluntarily surpass basic levels of care solely in accord with held values that may not be shared or expressed by others. It may also be, however, that some producers do not equate good welfare with making all possible or even feasible efforts to reduce pain or suffering. Enabling cattle to experience fully natural lives – including some hardships – may also be seen as providing opportunities to lead relatively authentic or meaningful lives.

A recurring theme was economics. On one hand, participants believed that thin profit margins had constrained the ability of some producers to improve shelter or handling facilities. On the other hand, producers indicated that their cattle were not subjected to poor welfare in order to reduce costs as such actions would eventually reduce revenues. In short, participants were decidedly satisfied with the level of care currently provided to their animals. However, most participants were willing to alter their rearing methods in order to accommodate perceived customer wishes provided that those wishes did not conflict with basic standards of animal care.
and that consumers were willing to pay. Hence, any prospective welfare-oriented amendments to current practices must take into account feasibility, cost efficiency and impact upon retail pricing. Most participants expressed a love of working with animals but virtually all insisted that their relationship with cattle was not like their relationships with horses or dogs. In contrast, relationships with cattle were more distant and removed. Other motivations for ranching included a preference for the relatively independent lifestyle, the preservation of tradition, opportunities to steward a natural environment, and the satisfaction associated with helping to feed others.

The picture of beef producers that arises in our study is quite unlike the views of animal producers fostered by some critics. As examples, Singer (1990) claimed that “the meat available from butchers and supermarkets comes from animals who were not treated with any real consideration at all while being reared” (p. 160), and Regan (2004) maintained, with regard to farm animals, that “pain and deprivation are heaped upon them in amounts beyond human calculation” (p. 94). In contrast, our participants, although clearly subject to economic constraints and motivations, uniformly expressed an ethic of care, strong interest in and enjoyment of animals, certain ethical standards and concerns, and varying degrees of willingness to sacrifice their own comfort for the sake of their animals.

Public debates about the proper care and handling of food animals often fail to directly involve actual producers who play a vital role in implementing animal welfare practices. Giving voice to the beliefs and concerns of producers, as we have attempted to do in this study, could strengthen animal welfare policy by identifying topics that are likely to engage producers in change while
identifying areas of broad social consensus as well as disagreement. Similarly, farm animal welfare advocacy may more successfully engage producers in change if criticisms acknowledge and address the range of animal welfare views held by producers.

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Chapter 3: Canadian pig producer views on farm animal welfare

3.1 Introduction

Animal producers’ views about farm animal welfare tend to receive less attention than the views of citizens and consumers (Kauppinen et al., 2010; Driessen, 2012). Despite some notable efforts to reflect producer perspectives (e.g., te Velde et al., 2002; Vanhonacker et al., 2008) – plus a variety of more tangential “willingness to change” studies regarding producer preferences about traceability systems (Schulz & Tonsor, 2010), marketing contracts (Roe et al., 2004) and other programs (Norwood et al., 2006) – animal welfare policy responses have largely reflected the concerns of the non-producing public. Regulations on housing pregnant sows in the USA, for example, have largely reflected the views of voters (Centner, 2010), not those of pig producers. Given that pig producers may have quite different concerns about proper care (e.g., Tuyttens et al., 2010) they may not see such changes as necessarily good or even suitable for animal welfare.

In order to help remedy this imbalance, we have undertaken a comparative multi-sector study of how Canadian animal producers and non-producers view animal welfare and the animal welfare concerns that they hold. Chapter 1 focused on western Canadian beef producers who use an extensive production system with animals raised on pasture for most of their lives, followed by a few months in outdoor feedlots (Spooner et al., 2012). In this paper, we present the contrasting case of Canadian pig production which is mostly based on confinement systems, following a transition from extensive mixed hog farming which characterized the Canadian pig sector.

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2 A version of this chapter has been submitted for publication (November, 2012): Spooner, J., Schuppli, C.A. and Fraser, D. Attitudes of Canadian pig producers toward animal welfare.
through the early 1950’s (Novek, 2005; Statistics Canada, 2011). Whereas beef ranchers have not been subjected to widespread public scrutiny about farm animal welfare, this has not been the case with North American pig producers. Over the last few decades, public opposition to the “factory farming” of pigs has generated considerable criticism in the USA and increasingly in Canada. As with beef production, however, there has been little written about producers’ views on farm animal welfare.

It was our intent, therefore, to discover how people who are experienced in raising animals under these circumstances view animal welfare and how their views might differ from both non-producers and beef producers operating within the same geographic region. As in Spooner et al. (2012) we hoped to give voice to the producers by providing a detailed picture of their beliefs, values, and attitudes regarding suitable lives for animals so as to inform the public debate and to provide constructive input into animal welfare policy. It was anticipated that detailed Canadian stakeholder views about animal welfare – which have not been previously represented in the literature – would be nuanced and complex. Hence, this study – as with all others in the series – was conducted using a qualitative format featuring a relatively small number of participants. Methodologically, the research most closely resembles what Sandelowski (2000) describes as “qualitative description”.

3.2 Methods

Interviews were conducted from 2009-2010 with 20 individuals directly involved with the production of pigs in Canada. In Canada, pig producers typically engage in specialized production practices (i.e., rearing animals in selected stages of production). Producers normally
rear animals on a “farrow-to-finish” (birth to slaughter), “farrow to wean” (birth to weaning), “grower-finisher” (piglet to slaughter) or combination basis (King, 2006). Structural differences in the pork industry across Canada’s western provinces reflect differing production or specialization profiles. Whereas farrow-to-finish operations occur in 33% of “barns” in Manitoba – Canada’s largest western pig producing province (Government of Manitoba, 2013) – farrow-to-finish operations comprise 49% of barn operations in neighbouring Saskatchewan (Sask Pork, personal communication, August 15, 2013), western Canada’s third largest pork producer (Canadian Pork Council, 2013). As such, participants were sought in accord with a sampling strategy designed to include individuals associated with differing types of production and units of different sizes – though not on an industry wide, representative basis. Prospective participants were identified by several “key informants” (Hammersley & Atkinson, 2007) knowledgeable about the sector and directly by the researchers.

3.2.1 Participants

The 20 participants raised pigs in Alberta (9), British Columbia (3), Manitoba (2), Ontario (1) and Saskatchewan (5). Seventeen were directly involved with confinement operations where animals were kept entirely indoors. Three producers – managing the three smallest operations – ran “extensive” systems with pigs outdoors for at least a part of their lives. Two of these (one certified organic) kept animals entirely outdoors, while the third kept groups of pregnant sows outdoors until farrowing. Eleven were involved in owner-operated, independent farms (sole proprietorships, family-operated or communal partnerships). Five were associated with pig production companies, either employed as management staff or producing pigs in their own facilities under an exclusive contract to one company. Three were co-owners of pig production
companies and one of these was a former CEO. Seventeen of the 20 participants were involved mainly with ‘farrow-to-finish’ operations managing the entire life-cycle of pigs from birth to slaughter. Three of those 17 were also involved in producing breeding animals for sale to other producers. Four of the 17 were also involved in “weaner” or “feeder” operations, generally selling young animals to other producers. One participant operated such a “grower-finisher” operation, buying young animals and raising them to slaughter weight. My sample was overrepresented with farrow-to-finish producers in Canada’s western provinces. As a benefit, however, I interviewed more participants capable of addressing a wider range of animal welfare issues than would have been the case with a representative sample comprised of more narrowly specialized participants. The number of animals associated with each operation ranged from 7 to 625 sows (mean of 265) for independent producers and between 350 and 50,000 sows (mean of 11,088, plus one unknown) for pig production companies. Of the 20 participants, 16 were working full time in pig production, one was semi-retired, one was entering into unemployment owing to a company closure, and two had moved from active production into other employment in the swine industry. Fifteen participants were at least second-generation producers.

3.2.2 Interviews

Initial interviews, which lasted 1-2 h, were conducted face-to-face (10) or by telephone (10). All initial interviews were conducted by two interviewers, with one interviewer leading and a second contributing supplemental probes and follow-up questions. All interviews were tape-recorded and transcribed (verbatim). Notes were taken during the interviews and reviewed in detail afterwards by both interviewers for evidence of emergent, preliminary themes.
Immediately before each interview, participants were given a verbal summary of the study and were asked to review and sign a consent form, approved by the University of British Columbia Research Ethics Board, stressing confidentiality and the right to withdraw from the study at their discretion, although none withdrew.

During interviews, participants were invited to respond to an open-ended, semi-structured schedule of questions that had been pilot-tested by three student volunteers involved in farm animal welfare and production. Initial questions covered demographic details, current farm animal operations, personal farming/production histories, and whether participants ate meat (all did). All subsequent questions sought the meaning of animal welfare in various ways.

Respondents were encouraged to relate what “farm animal welfare” meant to them including any views on animal welfare beyond those specifically involving pig production. Participants were also invited to offer their views on (i) their understanding of “contented” or “happy” animals (a frequently stated goal of animal producers – see Spooner et al., 2012), (ii) the emotional capabilities of their animals and the extent to which they or their industry typically sought to accommodate animal emotions, (iii) any welfare-related concerns that they held or believed that the public might hold regarding pig production, (iv) whether they had ever encountered questions or concerns from the public regarding pig welfare and, if so, how they responded, (v) the general nature of the relationship between producers and their animals, and (vi) any animal welfare-related changes they may have introduced into their operations over their careers. Some were also asked if they would continue producing in the event of a major financial windfall, and if so, about any changes they might make in their operation, especially with regard to animal welfare.
Most respondents answered all questions, usually in the same order. In some cases, participants were accompanied by life partners and/or business colleagues who offered contributory comments that were transcribed and treated as participants’ views.

Participants were invited to volunteer any additional comments relevant to animal welfare, and all were encouraged to contact the researchers to add any supplementary comments afterwards if desired, although no follow-ups were received. Participants were asked for permission for follow-up contacts, and all agreed. Participants were invited to receive copies of reports arising from the interview(s) and all accepted.

Follow-up interviews were conducted with a purposive sample of seven of the original participants during the summer of 2011. The purpose of these interviews was to gain a more detailed understanding of producer views on three common invasive procedures: castration, tail-docking and teeth-clipping plus housing systems: indoor rearing, gestation stalls and farrowing crates. All participants invited to re-participate agreed. Follow-up interviews were conducted by telephone in 2011 by one interviewer and lasted 30-60 minutes.

None of the interviews involved viewing of pigs because of concern over bio-security and sensitivity to any producer concerns about animal-welfare-related research. However, producers sometimes showed photos of their animals and facilities.

Transcriptions were reviewed many times in conjunction with preliminary memos and field notes. Analysis was conducted using a “constant comparison” method (e.g., Glaser & Strauss,
1967); i.e., participant comments were divided into segments and classified or “coded” before being compared and grouped with similar or related comments from other participants. This process continued until emergent patterns appeared within the data that were subsequently identified as themes and outlined below. Major themes reflected saturated responses. Analysis was assisted through the use of NVivo software.

After the analysis of the interviews, two additional methods were used to look for supplemental producer views of animal welfare. These were (i) scanning numerous internet sites featuring producer on-line discussions about animal care and handling and (ii) an informal review of two prominent Canadian pig producer magazines, namely Western Hog Journal (Fall 2001-Winter 2011) and Better Pork (February 2006-October 2012). None of the commentaries deviated in any notable ways from the findings of the interviews.

3.3 Results

3.3.1 Meaning of “animal welfare”

When participants were asked to describe what the term “farm animal welfare” meant to them, most indicated that they did not use the phrase. In fact, many associated the term with criticisms of production practices raised by those outside the industry:

242: Well, unfortunately to me, it’s sometimes used in a bit of a … confrontational sense, in that it’s saying to us, as producers, that we are not looking after our animals.

Others regarded the term as indicative of a failure by non-producers to understand the integral relationship between adequate animal care and operational viability:
198: Well, the terminology certainly is one that brings to me the city versus others’ perception, because … if you’re going to be able to be a reasonable livestock producer … you have to have empathy for the animals and how they’re acting and how they’re growing and what their state of health is …. I wouldn’t call that welfare. That’s just kind of part of the business.

3.3.2 Definition of Animal welfare

Instead, participants were more inclined to use alternative terms such as “contentment”, “comfort”, “care” and “husbandry”. A few producers also referred to “happy” animals when describing the desired condition that they sought for their pigs; specifically, an animal that conveyed a discernible level of alertness and a healthy appearance:

242: Happy constitutes an animal that is perky, that has the right colour, that the hair isn’t a little long and non-shiny.

Participants also appeared quite confident that their experience equipped them to assess animal welfare and/or distress:

242: You know, once you get to work with animals, you can see immediately that those eyes are bright and they’re happy in their environment.

188: If you walk into your barn and … if you’re a herds person at all, you can tell if they’re in discomfort–if they’re uncomfortable or not.

In addition, participants clearly associated good animal care with biological health resulting in steady growth. Animals that were well cared for correspondingly “performed” best:
Animal welfare and productivity go hand in hand. So, good animal welfare leads to good animal practices – good animal husbandry – and leads to good productivity … If an animal is happy … it expresses it in its growth rate.

3.3.3 **Requisites for good animal welfare**

Good animal care, according to most non-organic participants, included the following elements:

3.3.3.1 **Proper environment**

Participants considered that rearing animals indoors enabled producers to provide appropriate climactic conditions which were almost unanimously regarded as superior to more “natural” conditions. Animals raised indoors were able to access dry areas, avoid insects and avoid overheating in summer through the use of sprinkler and ventilation systems, while remaining warm and sheltered during long, cold Canadian winters. Producers were also able to achieve suitable population densities:

242: You do want them to have enough space … an over-crowded facility is not ideal and usually leads … to problems of being too dirty as well … [but] … you need a balance of not too much space, because … pigs don’t seem to like that.

Maintaining good environmental conditions was seen as beneficial for both workers and animals:

314: You want to have a good environment, for people and pigs … [A] big goal for us is to keep the air as fresh as possible …. It is very bright, it's painted, it's white inside, it's all fluorescent lighting, very very bright barns right? It makes the people feel better and I think it makes the animals feel better.
3.3.3.2 Proper genetics

A few producers described efforts to select animals that were genetically or dispositionally suited to intensive operations – especially animals that were not excessively aggressive toward workers or other pigs:

300: [Genetically] … feet and legs were important, but the personality of the sow was also really important … We found that those [non-aggressive] sows were different. They were socially quieter and they were more … interactive with people, in a more positive way.

3.3.3.3 Good care and handling

Many emphasized the importance of patient, low-stress handling of animals which was seen as leading to good rates of growth and “conversion”:

226: In my own operations … you can walk in … and the animals are always relaxed and walk quietly, and you know that even when you're not there, people are not poking and prodding them.

While most alluded to stipulated handling procedures that entailed little or no use of electrical prods, proper handling was also facilitated by hiring caring workers and insisting on proper handling techniques – which included removing workers who failed to comply. Participants also emphasized the need to respect sensitivities of animal staff for the mutual benefit of people and pigs:

314: If there's a concern with one employee that someone's not treating an animal right, we come into this room and we talk about it. … With a farm this big you have to be sensitive to those things.
Concern for staff sensitivities also extended to sparing workers from having to perform certain practices:

300: On-farm euthanasia … can … really have an effect on staff. … There’s some real depression issues that you can face … because they just can’t handle that job. So we sometimes have our managers … take over that responsibility … for both the good of the pig and the person doing it.

3.3.4 Animal welfare versus access to natural environments

Most participants did not equate good lives for pigs with outdoor or “natural” environments. Rather, they saw outdoor rearing as posing challenges to animal welfare including the risk of acquiring diseases and the ensuing suffering, the use of poor food sources, plus other natural adversities:

242: If you run your sows outside … on a pasture … [then come farrowing time] … if it isn’t raining … you’ve got a beautiful litter of pigs. If it’s … raining, you come out to a litter of dead pigs.

314: If there's a problem we … treat that animal as quickly as possible to get her back to health. … If they're out [doors], there's coyotes, there's ditches, there's whatever. They can get injured, and here [indoors] … they're protected.

Some producers drew direct parallels between indoor facilities and hospitals and human health care:

314: We run it like a hospital as much as possible, right? ….. Our main employees – we have 14 people working here – we have to trust that they're doing this as well. If they …
had to visit another farm, we ask them to stay away from our farm for 2 days because there's a risk of bringing in something we don't have. It's like people in hospitals right?

The two extensive, non-organic participants maintained that outdoor rearing entailed welfare benefits, but both acknowledged trade-offs related to weather and nutrition. Hence, neither was opposed to indoor rearing on the basis of animal well-being per se. In fact, one extensive producer appeared to share the belief that indoor housing is better for the animals:

178: I was reading an article … saying how nice these modern barns are … and, you know … he's got a point … We've lost animals in minus forty weather … [so] … how am I supposed to say the pig likes that better than in the barn on concrete?... At least the temperature was warm and he was dry the whole time.

The one organic participant, on the other hand, advocated a more small-scale natural approach to pig production:

162: An animal was … meant to be on the ground, in the grass. … We think a pig should be a pig. They should be out rooting in the sun and the dirt and so on. … That’s where they prefer to live.

3.3.5 Views on accommodating natural behaviour

While confinement producers clearly favoured rearing animals indoors, there were differing opinions about the importance of accommodating natural behaviours or providing animals with novel objects to improve the quality of indoor living. While one producer forcefully disagreed with the need to enrich indoor environments in order to reduce tail-biting, another maintained that:
312: Pigs are pretty intelligent … We … try to give them a little bit something different each day or something to look forward to … We have chains, we have social holes in our pen walls so that they can stick their noses in and they can visit back and forth between pens.

Ultimately, though, efforts to provide more natural conditions were widely seen as involving trade-offs:

314: Honestly, probably, you could do it different. Let them wander in a big pasture, you know? Is that gonna make them a lot happier? Probably yes …. but … it would cost too much, right? … [And] … there would be a lot of problems that went with it.

3.3.6 Views on “family farms”

Intensive producers frequently challenged the common belief that traditional family farming leads to good animal welfare, insisting, rather, that corporate farms attend more consistently to animal care and environmental issues. In particular, participants cited lower piglet survival rates on family farms resulting from crushing by sows and other accidental deaths. Participants also opposed the view that any large farm is a “factory” and any small farm promotes high welfare:

300: I’ve seen some real wrecks and they’ve usually been in the smaller, family operations … [because] … most of the time larger farms are better trained and more responsible and more diligent.
3.3.7  Views on housing systems

3.3.7.1  Gestation stalls

Most participants regarded the use of sow gestation stalls or “crates” as consistent with good animal care, frequently citing their ability to curtail routine aggression plus domination by “boss” sows. Participants also noted that the simplicity of a stall system allows it to be operated successfully by less experienced staff:

308: To be honest … I find the more stalls the better as far as how each individual pig can be taken care of. … I generally like the fact that you have your own space, and basically … they seem perfectly content to me.

Still, some expressed ambivalent views about the use of stalls:

188: I keep my pigs in a cage — in a stall. I would never have a bird in the house in a cage. … You put a budgie in a cage and it’s got all the food and water it wants … but it’s not made to be in a cage. In the same context, a pig ain’t made to stand in a stall all day and yet they do. And would they be happier outside freezing their ears off?

322: I do struggle with sow stalls. I'll admit it I do. … If we are truthful and we work with animals for the right reasons, we should always be challenging ourselves along the line of: are we really right in doing what we're doing? And I often don't have a full conversation with myself on that because I feel that I could talk myself out of a job.

3.3.7.2  Group/Loose housing

Group housing was regarded by some participants as providing a potentially better option for sows, partly because it was seen as the best way of reducing lameness:
302: Well you go to loose housing: like I say, it's better on the animal, it's better on their feet and — it's just better.

 Nonetheless, most were critical of group housing in some way. Concerns were largely associated with satisfactory feed intake often in light of experience with earlier, unreliable group-feeding technology. Concerns also included individual monitoring and health care plus control of aggression:

 302: It's more work, loose housing. When you go into your records, you find a sow that doesn't eat. You have to go look for that sow, see where she is and why she's not eating. When she's in a stall, you walk past her, you notice right away in her food.

 300: We’ve gone to large groups on straw and we’ve … actually had probably more health challenges …. so, the mortality and the health concerns have been a lot higher and more challenging in the large groups.

 Participants were clear, however, that group housing engendered a positive attitude in staff, which, in turn, was presumed to improve animal care and handling:

 300: With deep-bedded sows [in groups], there’s … a very high level of satisfaction … because people see the real social character of the sow … and that interaction … really makes people … want to know more about stockmanship … [and] … I would say, stronger technicians, because of … the compassion they have for the individual animal.

 3.3.7.3 Farrowing

 Participants emphasized the welfare merits of farrowing crates including protection of piglets and the ability of producers to conduct routine management practices in timely ways:
242: We used to farrow our pigs in open pens, and I would never want to go back there because of the welfare issues to the babies. I mean, just too many of them get stepped on and laid on and maimed or killed, and so to me a farrowing crate is one of the greatest animal welfare tools there is.

One extensive producer claimed that their outdoor farrowing resulted in late castration of piglets:

178: We physically can't get to our piglets for probably six to eight weeks. So we're castrating at eight to ten weeks … and so our castration process is probably quite a bit more painful than it needs to be … just because … we're farrowing on the pasture.

3.3.8 Views on invasive management practices 3.3.8

3.3.8.1 Castration

Castration, which was routinely conducted a few days after birth, was regarded as necessary for preventing boar taint in pork, but potentially upsetting for non-producers:

324: I actually showed the castrations to the class [of visiting students] … and it's shocking to see if you've never seen it before. But … I grew up on the farm so that was just part of what's done, and you become accustomed to it.

While admittedly painful, most considered the discomfort from castration to be relatively short-lived as evidenced by the speed with which piglets typically resumed normal behaviours such as nursing:

324: I wouldn't say it doesn't affect them because some of them do sit or need a rest … or I've even seen them vomiting from it, but … that's a short-term thing, and then they're up and healthy and healed.

Early castration was seen as minimizing the pain:
328: It’s done while they are young so the pain is minimum. ... It causes pain but it is for a short period.

Anaesthesia was almost never used for many reasons including expense, effectiveness, additional restraint time and post-surgical grogginess. One producer likened castration to human circumcision which they understood as being typically performed without pain medication. One of two participants who acknowledged having attempted to provide medication reported poor results:

328: I did … for about a year … add … a bit of an … over-the-counter pain (medication).

It gives them quite an aesthetic. It numbs them. It puts them to sleep and it puts them into a kind of docile state …. [but] … I was getting death losses because [when the sow laid down] … they would not get out of the way and then they'd die.

Participants were unanimous in their objection to the possible use of chemical (or “immuno”) castration, citing worries about consumer acceptance, handler safety and pig well-being:

308: I wouldn’t want to eat an animal that’s been given that. … From what I understand you give two needles, four weeks apart when they are 180 pounds or whatever, and that’s way more labour intensive. And of course you don’t want to stick yourself either, right?

3.3.8.2 Tail-docking

Participants stressed that tail-docking was done to minimize the adverse effect of tail-biting and were adamant that docking represented a far lesser hardship. As one participant explained:

306: I think if I was a pig I would say, ‘Take my tail off’ because you leave tails on and the other pigs … start biting … and they don’t stop … and will chew right into the rectum. So tail-docking is more for the well-being of the pig.
Producers generally felt that the pain associated with docking was minimal – apt to cause no more reaction in an animal than receiving a needle, or according to one producer, losing a finger – again citing the rapid resumption of normal behaviour:

328: You clip their tail … and right away they go and start suckling. If it was a huge pain and a lingering pain then, you know, they would be uncomfortable and they would not go straight into normal behaviour.

3.3.8.3 Teeth-clipping

The once-routine procedure of clipping the “eye” teeth of young piglets (to prevent injuries to other piglets during competition for teats) was rarely practiced by the participants. Instead, participants typically clipped when tooth-related injuries were seen. Still, one participant felt that teeth-clipping should be practiced more frequently to prevent injuries:

264: Things like teeth-clipping – a lot of places have abandoned that, but you see a litter where pigs are hacked all to rat-shit. … We’re not necessarily looking after welfare by not clipping those teeth.

On a more general level, participants saw some pain as a normal and acceptable part of life:

270: I’m in favour of animal welfare if it means actually providing more comfort and … less stress and pain for our animals. I do draw the line … if that means that animals never suffer pain. …. I … as a human being, suffer pain quite regularly.

306: Unfortunately to a certain extent life is painful, and it's not only painful for us, it's painful for the animals as well, and that bothers some people more than it does other people.
3.3.9 Animal welfare and economics

Participants’ views about animal welfare were inextricably and unapologetically linked to economics in several ways. First, participants saw good animal welfare as essential for minimizing costs:

316: Everything we do is for a specific purpose for animal welfare, because animal welfare, bottom line, makes us money. If the animals are suffering in any-which-way, it costs us big bucks.

Second, participants saw market forces as requiring farms to be large and practices to be competitive with large-scale production:

316: We get questions about why can't we get all the pigs running in the back and have them in the field? … I'd love to raise them like that. I'd love to have just a handful of pigs, but you know what I have to sell a pig for? I wouldn't make a living.

Consumer demand for low-cost food, however, was seen as ultimately dictating the move to larger farms and cost-efficient production methods:

178: The urban population has, for so long, demanded cheap food … [It is] that demand for cheap food that has driven the necessity to modernize and become more efficient and get bigger.

Some participants saw animal welfare as an issue to be decided by individual consumers and expressed through market demand:

198: It’s an individual choice, right? So, how do you write a law that says this choice is right for everybody? There is no such thing. … Let’s make sure the right information is there, the right categorization, auditable or certifiable, and then let the market determine whether it’s right or not.
Despite the economic constraints, however, participants expressed satisfaction over their management of their animals:

314: We treat them the best we can for the situation they’re in.

3.3.10 Other areas of agreement and disagreement 3.3.10

3.3.10.1 Pigs versus pets

Several participants drew a clear distinction between pigs, as a socially designated food animal, and pets. This distinction was reflected in their professed responsibilities to their animals:

270: The goal is not to have the animal suffer needlessly, but yet, they do provide a function of supplying animal protein to people that pay for that. And, there needs to be the right balance to make it work. You can’t apply what happiness is for my pet dog, with what my animals have to do to fulfil their role in this world.

312: They’re not pets …. and they’re not people! They …. should not have the same human expectation as far as enriching them to their full potential.

3.3.10.2 Animal welfare and organic production

While the organic participant in this study advocated providing animals with outdoor access, participants with intensive operations claimed that organic and extensive production could not produce enough human food. One producer predicted that organic-only production would lead to starvation. Another (commenting on a friend who raises pigs outdoors) agreed:

188: I guess these animals maybe have a higher quality of life than a confined animal. But, the reality is, he raises a few pigs for himself. … Therein lies the question: … Do you produce animals to feed the world?
In contrast, the organic producer considered his type of smaller operation capable of producing safer food:

162: As far as feeding the world, it’d be a lot safer food supply if we had a bunch of small farms like mine producing 100 pigs a year versus one big barn.

3.3.10.3 Views on proper care and the need for accountability

Participants frequently expressed resentment or disgust over cases where animals were abused or neglected:

300: Nobody’s more embarrassed than a fellow pork producer when somebody abuses animals: where they’ve starved and where they’ve been maltreated. … That’s an embarrassment and there’s absolute disgust with it, because we’re all stock-people – we’re all … caring of animals and that’s why we’re in this industry.

While some producers called for increased industry accountability, proper care was thought to be safeguarded through the adverse economic effects of poor health:

306: Proper care goes hand in hand with performance. … Every farmer's different: one person has more feelings, more care. But … at the end … the good news is that performance drags when things aren't taken care of properly.

Some participants saw animal advocates and others as potential allies in efforts to establish better self-policing of animal care:

270: There is legitimate questioning and opposition to what it is we do, absolutely. There are bad players …. and if it takes consumer groups to highlight that and embarrass us, so that we are more proactive, so be it.

Another participant saw advocacy groups as providing a “third-party” view:
324: I've been at this for 40 years — you got your head in it all the time, you don't always have that third-party perspective that can shed light on a situation. And if there's a better way to do things, then let's move in that direction.

Still, there were also criticisms expressed about advocacy groups including excessive or arbitrary demands for space allowance and disseminating false information:

328: Looking at a lot of PETA sites … there is a lot of misinformation out there. … They were saying … that they [the producers] rip their teeth out with pliers. That was one of their comments — which is just absolutely false. … It amounts to spreading basically propaganda.

198: It's pretty easy to jump to conclusions based on your own experience, and if you haven't got any of it, then it's even easier. Because, what you’re relying on is public media for your information and there’s clearly vested interest groups.

More broadly, producers were critical of members of the public who advocated excessively “natural” rearing systems or supported enforcement policies that were regarded as excessive:

316: As far as I'm concerned … the general public thinks it's better for the animal to be free of everything. If an animal … is sick or something, just like a person is, to give it antibiotics to make it better — it's a necessity. What are you going to do – let it die?

Good animal welfare practices were also seen as arising from scientific research. One producer acknowledged that scientific advances had reversed his views on the humaneness of carbon dioxide gas stunning at slaughter plants. Another commented:

242: The Banff Pork Seminar is going to be on this week. I’m here to learn of the newest things, and always we’ve got animal welfare as one of the topics there. But I try to keep
up fairly good with a lot of the research that’s being done and so where possible, you try to implement that into your own operation.

3.4 Discussion

As in the previous study of beef cattle producers (Chapter 2), participants reported not using the term “animal welfare”, seeing it rather as a phrase used by critics of production practices. Participants preferred to discuss animal comfort, husbandry or care. Most participants clearly equated satisfactory lives for animals with good biological health and functioning – elements that are almost universally seen as fundamental to animal welfare (Fraser et al., 1997; Dawkins, 2004). In this way, participants’ views resembled those of many conventional European pig producers (Bock & van Huik, 2007; Borgen & Skarstad, 2007; Kling-Eveillard et al., 2007; Menghi, 2007; van Huik & Bock, 2007) and of American author and pork producer John Kellog (2005). In short, most favoured providing animals with artificially controlled confinement environments that were properly outfitted, managed and maintained.

Broadly, participants viewed confinement systems as enabling them to protect animals against accidental death or serious illness including the use of farrowing crates to prevent crushing of piglets and gestation stalls to prevent aggression-related loss of embryos. More narrowly, artificial environments – which were seen as providing protection from harsh weather, predation, parasites and nuisance insects – were also seen as minimizing exposure to pathogens that could cause illness and suffering.
Significantly, some producers made direct comparisons to hospitals (where the goal of maintaining health routinely overrides the freedoms or desires of patients) as has Novek (2005). In turn, pigs were looked upon as animals that responded well – in terms of growth and reproduction – to diligent and systematic care within controlled environments. Hence, intensive operations were regarded as achieving this desired result, whereas outdoor production and traditional small farms were seen as less suitable.

Apart from the one organic participant, producers did not equate quality care with access to natural environments. Even the two non-organic participants who were engaged in extensive production presumed that animals could live contented lives indoors. Thus, most participants exemplified what Fraser (2008a, p. 54) has described as an “industrial” world-view in which nature is regarded not as an ideal state but as “an imperfect state to be controlled and improved” (Novek, 2005). According to Woods (2012), such views reflect a tradition evident in the history of intensive pig production which has sought to enhance animal flourishing through the eradication of adversities that reduce growth.

Nonetheless, some participants acknowledged deficiencies in indoor environments. Some producers were ambivalent about whether pigs are frustrated by living indoors and being unable to engage in natural behaviours. Others believed that pigs would prefer living outdoors – at least during favourable weather. Still others made efforts to enrich their indoor environments through the use of straw bedding and play items such as chains.
Good welfare for pigs was also associated with good care and handling by staff and with hiring empathetic workers – a view that is in keeping with the known effect on animal welfare and performance of stockpersons’ attitudes and behaviour (Hemsworth et al., 1989). Good care was also associated with minimal use of electric prods to move animals. Furthermore, staff were seen as a valuable resource, and notable efforts were made to provide them with clean, bright, well-ventilated working conditions and to relieve sensitive staff from performing euthanasia. Animals were regarded as benefitting indirectly from such attention to the well-being of staff. At the same time, confinement systems were looked upon as being more manageable for relatively unskilled workers.

Farrowing crates were seen as important for animal welfare because the restriction of movement was regarded as more than acceptably offset by greater piglet survival. Alternatively, while most participants expressed support for individual gestation stalls for sows, most acknowledged drawbacks as well. Stalls were seen as allowing individual feeding and monitoring of feed intake, reduced fighting and efficient use of labour, but most participants recognized that stalls prevented natural behaviour. Group housing of sows was acknowledged as compensating for some of the shortcomings of stalls while also engendering greater satisfaction among staff who could witness a wider range of animal behaviour. This in turn was thought to inspire stockpersons to greater effort in animal care. Nonetheless, participants were concerned that group housing would introduce animal welfare challenges, especially sow aggression, uneven feed intake and difficulty in monitoring individual animals. These concerns may have been influenced in some cases by a lack of personal experience of group housing, and by early Canadian experiences of electronic sow feeding systems that did not function successfully. If so,
then the growing familiarity of producers with successful non-stall systems may lead to a gradual increase in acceptance (see Tuyttens et al., 2011a; van Huik & Bock, 2007).

Nonetheless, while most participants felt resigned to the eventual inevitability of group housing, opinions were mixed regarding anticipated outcomes. Given participant concerns, therefore, it would seem reasonable that efforts to facilitate or support a successful transition to group housing would be welcomed by individual producers (e.g., see de Lauwere et al., 2012). At the same time, given the importance that participants attached to first-hand knowledge or experience when assessing animal well-being, increased exposure to pigs in group settings may also eventually allay concerns about group housing.

Like other food-animal producers (Vonhanacker et al., 2008; Phillips et al., 2009; Wells et al., 2011; Spooner et al., 2012), participants generally accepted some invasive management practices as unavoidable. Castration was described as a consumer-driven necessity to avoid boar-tainted meat. Tail-docking, on the other hand, was regarded as preventing greater welfare problems from tail-biting; thus it may have been seen as necessary and the “lesser of two evils” (cf. Wells et al., 2011). In the same vein, one participant supported the once-routine practice of tooth-clipping newborns to prevent painful facial lacerations. Although two producers had made efforts to provide pain control during invasive procedures, the pain associated with these practices seemed largely accepted, perhaps because of the cost of pain management, or because anaesthetics were seen as increasing the risk of piglet crushing, or because pain management was seen as imposing additional piglet stress from handling and injections as claimed by some European producers (cf. Borgen & Skarstad 2007; Tuyttens et al., 2012).
Economic considerations and animal care practices were inseparably intertwined for most participants. First, animal welfare – conceived mainly as biological health and functioning – was seen as supporting efficient production. Second, perceived consumer demand for low-priced pork was seen as reinforcing the need for intensive production systems. Third, many saw economic realities as dictating that pigs could not be provided with lives enriched to their maximum potential. Given that this study was undertaken during a period of low incomes for Canadian pig producers, this may have been a reality experienced by many participants themselves. At the same time, there was widespread support for a market-based approach to animal welfare whereby consumers could create demand for specialized production methods. Thus, in contrast to regulatory approaches to animal welfare (e.g., as adopted in Sweden and Norway, see Kjaernes et al., 2009), many participants in this study seemed to favour a free-market approach predicated on consumers informing themselves about production methods and then signalling a demand for preferred methods through the market.

Nevertheless, some participants favoured a strict approach and tougher penalties in cases of animal abuse or failure to provide appropriate care. Some participants even welcomed efforts by animal protectionists to expose unacceptable practices as a means of reducing such behaviour. In summary, of the different policy options for animal welfare assurance initiatives outlined by Fraser (2006), the participants appeared to support (1) a regulatory approach in cases of failed animal care, (2) a market-based approach, presumably facilitated by labelling, so that consumers could create a demand for alternative production systems, and (3) audits or other means of ensuring adherence to standards upheld by producers themselves.
The views of participants suggest several actions that the pig production sector could consider. One is to support and participate in animal protection enforcement to deal with negligent producers. More generally, and rather than relying upon animal protectionists to publicly embarrass the industry at times, producers might formally cooperate with animal protection organizations as part of a collective shift towards a more professional occupational model, involving self-regulation based on accepted standards (Hurnik, 1988; Fraser, 2008b). A third effort would be to create public dialogue and consensus-seeking involving a science-based approach to animal welfare practices and standards, as supported by participants in our study and broadly by the general public (Lusk & Norwood, 2008).

Research on conflict resolution has shown that “deeper understanding by the parties of their own and each other’s perspectives, priorities, and concerns enables them to work through their conflict together” (Friedman & Himmelstein, 2006, p. 524). Unfortunately, public debates about the care and handling of food animals often fail to involve actual producers who play a vital role in animal welfare. Giving voice to the beliefs and concerns of producers, as we have attempted to do in this and other studies of stakeholder parties, could help strengthen animal welfare policy by identifying topics that are apt to engage producers while identifying areas of broad social consensus as well as areas of disagreement that need to be resolved. Moreover, as noted by Picard and Melchin (2007), “developing insight about our values and interests can change how we experience conflict, which can shift the conflict situation from impasse to an attitude of openness to the concerns of the other party and to the possibility of resolution.” (p. 40). Inasmuch as our studies help to engender self-awareness among stakeholders, our efforts may also facilitate dialogue and collaboration as an alternative to what Driessen (2012) has called the
“adversarial and entrenched oppositions” that have tended to dominate public discussion of farm animal welfare.

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4.1 Introduction

In general contrast to both beef and pig producers, some members of the Canadian/North American public have been quite vocal in expressing their views about (i.e., opposition to) contemporary food animal rearing and handling practices. Hence, farm animal welfare issues have often been approached as an area of conflict between producers and non-producers. Following intense public reaction to Harrison’s *Animal Machines* (1964) and Singer’s *Animal Liberation* (1975), disputes over animal welfare between animal producers and the non-producing public have remained prominent. In the USA, citizen petitions have given rise to legislative initiatives – including California’s high-profile, multi-million-dollar media battle over “Proposition 2” in 2008 – which have resulted in the prohibition of highly confined housing systems in numerous states (Centner, 2010). In Europe, surveys revealing citizen concern over intensive agriculture and pressure for higher farm animal welfare standards (European Commission, 2005:2007; Kjaernes & Lavik, 2008) have led to widespread regulations. As noted by Driessen (2012) “adversarial and entrenched oppositions” have tended to dominate public discussion of farm animal welfare.

Perhaps, however, conflict is not the only option. According to Friedman and Himmelstein (2006), research on conflict resolution has shown that “deeper understanding by the parties of their own and each other’s perspectives, priorities, and concerns enables them to work through

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3 A version of this chapter has been submitted for publication (May, 2013): Spooner, J., Schuppli, C.A. and Fraser, D. Attitudes of Canadian citizens toward farm animal welfare.
their conflict together.” (p. 524). Moreover, as noted by Picard and Melchin (2007), “developing insight about our values and interests can change how we experience conflict, which can shift the conflict situation from impasse to an attitude of openness to the concerns of the other party and to the possibility of resolution.” (p. 40).

In this context, research intended to identify beliefs and concerns related to animal welfare, as held by both producers and non-producers, has been undertaken in Europe, principally in connection with the Welfare Quality Project (Blokhuis et al., 2010). In contrast, public understanding of farm animal welfare has received considerably less attention in other geographic areas. Given the considerable geographic and cultural differences between Canada and Europe, I undertook a multi-study project intended to elicit some citizen views regarding good – or perhaps more pragmatically – satisfactory lives for food animals. The purpose has been to facilitate discussion, identify shared values regarding animal welfare, engender self-awareness among stakeholders, and facilitate consensus-building on farm animal care and handling practices. Hence, the aim of this chapter, is to describe the views of some Canadian non-producers interested in farm animal well-being.

4.2 Methods

Interviews were conducted with 24 members of the Canadian public residing in British Columbia (12), Alberta (2), Manitoba (1), Ontario (6), Quebec (1) and Nova Scotia (2). Participants were recruited through a purposive sampling strategy which sought: (i) adults with an a priori interest in farm animal welfare, and (ii) a rural-urban residency ratio consistent with Canadian demographics (Statistics Canada, 2006). Given the preliminary nature of this research, those with
an existing interest were expected to be: (i) willing and able to discuss farm animal welfare over the course of an anticipated 90 minute interview; (ii) be potentially/relatively informed about modern production practices; and (iii) represent citizens most inclined to advance personal welfare related preferences among Canadian stakeholders. In this way, participants did not comprise a traditional representative sample. Nonetheless, given the longstanding disinclination on the part of any Canadian federal government to meaningfully address or amend existing farm animal welfare legislation, national statistical representation may be of less significance in this regard. Instead, it may be more likely that future changes to farm animal welfare practices – were they to occur (perhaps through corporate initiatives) – will come about in response to the views of a minority (i.e., non-representative) sample of vested citizen stakeholders.

Moreover, based on previous research, it was well known that women are more concerned about the treatment of animals (Herzog et al., 1991; Pifer et al., 1994; Taylor & Signal, 2005; Herzog, 2007; Ellis et al., 2009). It was also known that women comprise the majority of those engaged in animal rights movements (Herzog, 1993). Hence, it was expected – and accepted – that we would elicit a disproportionate number of women participants.

According to Kendall et al., (2006, p. 418), who found that “talking with farmers” was significantly related to attitudes about farm animal care, efforts were also made to stratify the sample on the basis of urban and rural residency (i.e., to interview some citizens living in rural areas). This was also consistent with Vanhonacker et al. (2008) and Prickett et al. (2010). To this end, and among other recruitment methods, advertisements were posted in rural libraries and various regional publications. In addition, participants were recruited directly by the researchers,
members of the UBC Faculty of Land and Food Systems, through advertisements on the UBC Animal Welfare Program web site, and with the assistance of some participants themselves.

### 4.2.1 Participant information

The 24 participants included 21 females and 3 males from 6 provinces. Fifteen (62.5%) described themselves as from urban environments and nine (37.5%) from rural. Participants had had different degrees of exposure or experience with farming. Five had been raised on hobby or commercial farms, five had family connections to a farm which they visited, four had worked on farms as students, volunteers or employees, six had visited friends’ farms with some frequency, and four had rarely visited farms. Two of the 24 were currently hobby farmers. Participants also had varying degrees of involvement with animal protection organizations. One was employed by an animal protection organization, 17 had volunteered with or supported such an organization in some way and the remaining 6 had not. Six participants described themselves as “practicing vegetarians” (i.e., no consumption of food animal flesh). Among the remainder, five described their diets as being somewhat meat-restricted (usually no red meat) for philosophical reasons while two reported limiting their red meat intake owing to concern over cholesterol levels.

### 4.2.2 Interviews

Semi-structured interviews, which lasted approximately 90 minutes were conducted face-to-face (22) or by telephone (2). Seventeen interviews were conducted by two interviewers with one leading and a second contributing supplemental probes and follow-up questions. All interviews were tape-recorded and transcribed (verbatim). Notes were also taken during the original interviews and reviewed in detail afterwards by one or both interviewers for evidence of
emergent, preliminary themes. Immediately before each interview, participants were given a verbal summary of the study and were asked to review and sign a consent form, approved by the University of British Columbia Research Ethics Board, stressing confidentiality and the right to withdraw from the study at their discretion, although none withdrew.

Initial questions covered demographic details, experience of farms, involvement with animal protection organizations and current diet. All subsequent questions sought perspectives on farm animal welfare in varying ways. Participants were invited to respond to an open-ended, semi-structured schedule of questions that had been pilot-tested on student volunteers involved in farm animal welfare and production. Respondents were encouraged to relate: (i) what “farm animal welfare” meant to them; (ii) criteria they might use to assess whether animals were being subjected to positive or negative welfare practices on farms; (iii) whether they had always held their current views on animal welfare as well as any notable influences on their thinking; (iv) their opinions about viewpoints that differed from their own; (v) the extent to which animal welfare influenced their behaviour as consumers plus their preferences, if any, regarding animal-welfare-related product labelling; (vi) the role that key stakeholders — including consumers, producers, governments, production and retail industries, advocates, media, veterinarians and others — can or should play in facilitating animal welfare; (vii) their vision of an ideal animal-related society and what a first step in that direction might require.

Some participants were also invited to respond to one of two additional textual queries. Three participants were presented with a brief “questerview” (a research tool in which a self-completed, multiple-choice questionnaire in this case, is administered within a qualitative
interview during which participants are encouraged to discuss their responses in–depth; see Adamson et al., 2004) intended to further elucidate views on farm animal welfare. This elicitation method, however, was eventually deemed to be ineffective by the researchers and was abandoned. Fifteen others received a compilation of 30 welfare-related attributes reflecting three elements of animal welfare (basic health and functioning, natural living, and affective states, as described by Fraser et al., 1997). The compilation was offered to participants mainly in cases where initial comments about animal welfare were brief or general. Participants were invited to address any of the 30 attributes in light of their earlier comments about animal welfare. Respondents answered most or all questions which were usually posed in the same order. In some cases, participants were accompanied by life partners who contributed comments that were transcribed and treated as participants’ views. Participants were also invited to volunteer any additional comments relevant to animal welfare, and all were encouraged to contact the researchers to add any supplementary comments afterwards if desired. One supplemental comment was received. In turn, participants were normally asked for permission by the researchers to initiate follow-up contacts, and all agreed. Participants were invited to receive copies of any reports arising from their interview(s) and all accepted.

Transcriptions were reviewed many times in conjunction with preliminary memos and field notes. Analysis was conducted using a “constant comparison” method (e.g., Glaser & Strauss, 1967); specifically, participant comments were individually segmented, identified and classified or “coded” – until no further codes were required to reflect new data – before being compared and grouped with similar or related comments from other participants. This process continued until emergent patterns appeared within the data that were subsequently identified as themes and
outlined below. Analysis was assisted by the use of NVivo software. Numbers were arbitrarily assigned to each participant for identification purposes and these appear with each quotation. Verbatim responses appear in quotation marks.

4.3 Results 4.3

4.3.1 Linking animal welfare to moral concepts

When asked to describe what the term “farm animal welfare” conveyed to them, most participants made reference to morals or ethics and the humane rearing of animals over the course of their entire lives:

250: The ethical treatment of the animals while they’re being raised from the farm to the slaughterhouse — that they’re treated humanely, and that they’re farmed in a sustainable manner.

Some participants also used terms related to oppression (“enslaved”, “colonialism”, “concentration camps”) when referring to animal production practices.

4.3.2 Elements of animal welfare 4.3.2

4.3.2.1 Natural environments

Participants overwhelmingly related animal welfare to access to natural environments and the ability to express natural behaviour. Frequent references were made to animals “just being outside”, “having their feet on turf, not just concrete”, “grazing out” and “being able to get outside and breathe fresh air and feel daylight”. Most regarded natural living as being consistent with animals’ natural predispositions. Examples included references to animals living in habitats that “resemble the habitats that they would be in”, “according to its instincts or how it would
normally spend its time”, “promoting species-specific behaviours … mimicking their evolutionary wild state”, and “natural food or sources of natural light”. Participants also emphasized the importance of “choice” associated with natural living and to “not to restrict the normal … movement process of an animal”:

216: They can choose what they eat, where they eat. They can lie down if they want to. They can go where they want to.

103: They have a choice to able to … go indoors or outdoors, or a choice of whether they … are able to play, or things like that.

Participants emphasized natural social behaviour with phrases including “it's their natural instinct to want to socialize in groups”, “to have others of their kinds around”, “contact between mothers and young” and to “display their normal, behavioural traits.” One participant linked natural behaviour to health, claiming that animals in feedlots are:

250: … not exercising. They’re not healthy. They’re more prone to getting diseases. So I guess I envision … cattle grazing on lots of land, and space, and having room to roam.

4.3.2.2 Affective states

Participants often cited affective states when defining animal welfare, with references to freedom from “pain and fear”, “stress”, “suffering” and “loneliness”. Many also made allusions to positive welfare or “happiness”. Some expressed concern about inflicting pain on animals without appropriate pain management. For one participant, pain minimization was considered “an absolute priority”: 
218: In an ideal world … every procedure that's done, if it's necessary such as dehorning, is done in such a way in which the animal is respected as far as their pain management needs are concerned.

4.3.2.3 Health

Participants made relatively few references to health and statements that were made were often qualified. In particular, although participants related animal health to animal welfare, they did not support efforts to protect animal health at the expense of access to natural environments:

122: Overall in my opinion the benefits of the more natural life outweigh any potential disadvantages of the occasional injury. … There’s got to be a limit to optimizing biological health at the expense of what you’re losing in the natural life of an animal.
106: So it's not just biological — are they getting enough food, and are they surviving … not getting sick and whatnot. But it's also are they emotionally and socially satisfied?

Instead, participants favoured a somewhat moderate approach to biological health and functioning that reflected a combination of reasonable preventative measures and prompt attention to injuries or illnesses. One advocated a herd size “that’s manageable from the point of view of regular contact with each individual animal to see if they are injured, but at the same time allowing them out in a more natural environment.” When asked about protecting animals from injuries to maintain health or to avoid pain and suffering, one participant seemed to assign greater priority to the animal’s affective state:

122: Health is important to the animal but the animals themselves suffer and feel pain. That’s more important to me.
Another wanted animals to be raised under optimal conditions so that not only are they producing healthy, safe meat, they’re also living their lives “in a way that they enjoy.” Still another wanted animals to be comfortable and commented that while it would be “nice for them not to have diseases” was “suspicious” about excessive or inappropriate use of “vaccinations and … hormones.”

4.3.3 **Proper handling as reciprocal recognition**

Participants often associated good or satisfactory lives for animals with careful handling by producers or care-takers. Among other priorities, participants stressed the need for “a level of respect”, “a personal relationship”, and an awareness “of how animals react.” Animal welfare for most participants entailed providing farm animals with a reasonable degree of reciprocal consideration for the sacrifices demanded of them. For example:

202: [To have a] … system wherein we're going to eat animals and we're going to use them to create dairy products or such. But we're going to do it in the knowledge that these are creatures, they're sentient beings, they have a capacity to suffer and to feel pain, to experience emotional distress.

4.3.4 **Animal welfare in relation to type of production**

Participants clearly believed that good or satisfactory lives for farm animals were most apt to be attained through small family farming:

240: I think especially small farmers who interact with their animals in a more natural circumstance probably care a great deal about their animals.
250: Well, I guess just looking back to the smaller farms, and how it used to be —
communication, petting the animal, going out there and just giving them nurturing and
loving.

Participants widely — and often strongly — opposed intensive animal production which was
regarded as denying animals access to natural environments and/or opportunities to express
natural behaviours in favour of increased production:

200: I’ve seen chickens that are put in where there’s … not a window, or a natural light
going into the building … So … you go in there, and it’s … not a pleasant thing.

174: Very large intense operations where the hogs are kept inside all day — that, to me, is
not consistent with animal welfare.

202: Milk-fed veal is a big issue in terms of raising an animal to produce a particular type
of food and in doing so, causing it to suffer.

While participants clearly favoured small-scale production, some did allude to animal welfare
benefits from modern technological or intensive production methods:

106: Maybe a lot of animals don't need to be free-range to have a good life … They could
live very well within a barn if it's set up right …. Some wouldn't agree with me on that.

They'd say, "No, they all have to be free range." But physically you couldn't do that.

204: I think that the technology makes things worse for them. But, on the other hand,
maybe the technology, if used in a different way … could ease the suffering. Maybe …
[it could] … ensure that their surroundings are clean and … that they’re properly fed, and
... at the right temperature.

One participant also maintained that knowledgeable people could design indoor systems which
benefited animals, while another lauded the merits of a childhood relative’s indoor cage-free
system for hens which could have also been engineered to provide outdoor access while ensuring protection from predators.

Despite their opposition to large-scale production, no participants directly criticized individual producers or mid-range managers employed in large production companies. Participants were not unsympathetic to the economic realities of contemporary farm animal production and did not want to hamper individual producers or their families as this would amount to “punishing the wrong people”:

204: Maybe the first step has to do with legislation that [is] … not just saying farmers: ‘You have to … pull up your socks and … adopt ethical farming practices’ because then that’s laying the blame at their feet. And they are … probably making a lot of these choices because they feel that they have to.

103: I think farmers are really aware on animal welfare … and I think that … oftentimes the animal welfare standards may fall short because they’re not making enough money. … The economy, doesn’t allow them to do repairs on buildings, and things like that.

Participants also appreciated that economic concerns could impede producer efforts to improve animal welfare, and some looked upon individual producers as having little power to create industry-wide changes:

200: They are a business. So you have to make sure that they can remain competitive.

You can’t just regulate our farmers, and put restrictions on them, and still let everyone import that with no regard to animal welfare.

Nonetheless, many participants were critical of what they regarded as an excessive focus on profit which, they maintained, had contributed to intensive animal production. For example,
participants saw profit and greed as detrimental to animal interests, humanity and kindness. According to one, “when the focus is only the bottom line, things just go the wrong way.”

Participants did acknowledge, however, the challenges for even well-intentioned operators of maintaining high animal welfare standards within large, profit-oriented units. According to one participant, in discussing the appeal of idyllic, small farm environments on one hand, and market-based realities on another, “I don’t know how you reconcile those.” There was also an awareness that consumers, seeking lower-priced food, supported intensive production. According to one participant, “intensive agricultural production makes food cheaper and I would say the majority of people — of consumers — think about the cost.” Another participant, despite strongly favouring outdoor pig production, stressed that outdoor rearing could result in pork being too expensive for less affluent people. However, many participants also felt that consumers could influence improvements in farm animal welfare if willing. Many felt that consumers “vote, every time they spend money”.

4.3.5 Slaughter, transportation and auction markets

Participants frequently and spontaneously expressed specific welfare concerns over animal slaughter. According to one participant, for example:

122: I’ve been to a slaughterhouse …. and I’ll never forget it. … It was stressful for the workers. It was stressful for the students. It was stressful for the animals. There was so much noise. It was just an assembly line and the animals were tripping and it was pretty horrific.

Specific concerns were raised over improper or ineffective stunning:
I think there are some standards that are supposed to be in place where the animals are stunned or rendered unconscious before the actual slaughter occurs. But that doesn't always successfully take place and so some animals are slaughtered … [when] … they’re conscious.

One participant was concerned about ritual slaughter “because the animal’s not stunned before they’re slaughtered”.

To reduce long distance transportation to slaughter plants, participants were strongly in favour of more local slaughter plants or the use of mobile abattoirs capable of travelling to the animals:

From what I’ve read and heard, animals being transported to slaughter generally are transported incredibly long distances these days. … Methods of getting them there and the length of time it takes … really disturb me.

Two participants, (one currently a hobby farmer and another raised on a farm) voiced explicit concerns about auction markets where animals are bought and sold:

Well, I happened to be at the cattle market recently … [to see if] … anything has changed. Are the animals in better shape? Is anyone doing anything about these poor, emaciated cows? And basically nothing has changed. The animals are regularly beaten and prodded and pushed around…

4.3.6 Diminished value of food animal products

Participants strongly maintained that a factor contributing to poor animal welfare is the disconnection in the minds of consumers between animal products and the animals that produce them. In turn, this resulted in a lack of connection to the treatment of the animals themselves:
210: “Factory-produced” meat and eggs are … available in such vast quantities that people just buy them without thinking about where they’ve come from — or people kind of disassociate the meat from the animal.

107: I think that part of the responsibility of being a meat-eater is making that connection that an animal died in order for you to eat what's on your plate …. to make that connection that here was a living, breathing creature.

Furthermore, many believed that consumers no longer attribute the same value they once did to food animal products nor pay sufficient prices:

105: We think that we’re somehow entitled to cheap, cheap food. And I don’t think that’s the case.

107: I don't think we're paying enough, which is probably the problem.

138: I don’t think the consumers are ever asked to take on too great a price. … All food should be more expensive — way more expensive.

Some also maintained that higher consumer prices would facilitate higher animal welfare:

186: We should be paying way, way, way more money to eat this stuff. … It’s too cheap — that's the problem.

While it was often unclear whether participants who made comments about the need for greater consumer contributions also included themselves, some did express disappointment over their being “weak” or “hypocritical” with regard to their purchasing and dietary practices.

4.3.7 Promoting welfare

Participants advocated two approaches to encourage support for welfare-friendly food. The first involved efforts to enlighten consumers about the value of such products. According to one
participant, given that consumers are more apt to pay premium prices for products that are perceived to be of higher intrinsic value, consumers would be more inclined to value the quality of a food-animal product coming from an animal that had “had a better life.” The second approach was to educate children – especially urban children — about the origins of their food through more direct exposure to small family farms, farmers and farm animals:

180: I think you have to start with … educating the children that are coming up in school, about farm animals and that the animals are raised for a purpose.

202: I would say that kids should understand …. that a pig isn't just a piece of bacon — that it is actually a creature that likes to run and play and have a lot of fun. … So I think kids should be introduced at a very young age to being around animals.”

4.3.8 Individual projections

Some views appeared to reflect personal preferences projected onto animals:

204: The … free-range thing I think is important …. I’m a dancer and I’m happiest in an empty studio. So that, to me, speaks of abundance and lots of space.

202: Intuitively I know that if I was kept in a confinement stall … for long, long periods of time, it has got to involve suffering.

240: As my religion says, treat others the way you want to be treated. So I know that I would hate to be in a cage. So I can extrapolate that a chicken would hate to be in a cage.

4.3.9 Knowledge deficits

Participants occasionally acknowledged that they lacked first-hand knowledge about intensive rearing methods. One participant, for example, “heard how they’re kept in cages that are so
small that they can’t even turn around”, but also noted “not that I’m an expert in this.”

Furthermore, some expressed willingness to acquire more factual information before drawing conclusions, even if that meant overturning longstanding assumptions. For example, one participant emphasized “I need to have a more balanced view.”

4.3.10 Differing views among participants

Explicit differences among participants emerged on several topics. Some participants equated organic production with more acceptable animal welfare:

240: It is my understanding that organic farmers, whether or not they’re certified, tend to allow animals to engage in more natural behaviours. And I think that’s a huge difference.

186: I eat organic meat almost exclusively, and I do this because I have decided that those animals are going to be treated better.

Others, however, saw organic production as unrelated to, or not in the interests of, animal welfare:

208: I don't buy organic milk. I don't buy organic cheese. Because again, to me, there is no assurance that farm animal welfare is being considered in the process as well.

138: And then there’s a lot of times when organic is simply not the best thing for animal welfare. [Failing to provide] antibiotics is a really good example of that.

Participants also differed over the role of animal advocacy organizations in farm animal welfare. Some expressed largely unqualified support for the work of advocates; others expressed support for advocacy groups, but were concerned about unfactual claims made in advocacy campaigns; Others – notably participants who had been raised on family farms – were openly critical of high profile advocacy groups like “PETA”.

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4.4 Discussion

While extensive research has explored the views of European citizens about farm animal welfare, comparatively little research has been undertaken elsewhere. This study, therefore, was conducted as an initial attempt to shed light on some Canadian public opinions. As “a qualitative approach is especially appropriate when little is known about a topic” (Knight & Barnett, 2008, p. 32), we opted to utilize in-depth discussions. As is usual for qualitative studies, a purposive sampling method was used. Hence, adult citizens were invited to participate provided that they held “an existing interest in farm animal welfare.” Based on methodologist Joseph Maxwell’s advice that qualitative interviewers must seek to pose suitable questions which invite participants to speak at length on topics of personal interest or knowledge (Personal Communication, Joseph A. Maxwell, 2007), it was expected that interested participants would be able to express in-depth or rich data (i.e., expressed views) suitable for meaningful analysis. This decision was also consistent with the methodology used during one of the first multi-country studies of European consumer views regarding animal welfare (i.e., recruiting participants on the basis of existing concerns about animal welfare (Harper & Henson, 2001)).

Still, it is important to underscore that as a result of my sampling strategy, this study captured the views of a particular segment of “citizens” and not the views of “Canadian citizens” in general. This is significant in terms of generalizability. While policy implications or contributions may be inferred and advanced on the basis of these results, prospective policies grounded in this public sample alone are insufficient to represent the views of Canadian citizens writ large. For this, a more quantitative study (e.g. a survey) will be required.
Nonetheless, this limitation in no way disqualifies my results. On one hand, the Canadian federal government has given no indication for many years of meaningfully reviewing or introducing legislation intended to address public calls for improved welfare standards. One reason for this reluctance may be a political perception that food animal welfare concerns are of little importance to a majority of Canadians. Hence, this study is significant in that it sheds light on the views of those citizens (a minority?) who are clearly not content with the status quo. As such, this study sheds light on the views of those who will continue to advance – and perhaps in time – trigger welfare reform (e.g., perhaps initially through corporate rather than legislative channels).

It is also notable that to some degree at least, citizen participants in this study engaged in the practice of “othering” by: (i) speaking more about what others should think, do and value with regard to animal welfare than about themselves; and (ii) by replicating popular arguments advanced by social advocacy organizations. In this way perhaps, some may have been acting in ways parallel to those producers who appeared to champion views which defended the logic of their established production systems. Hence, subsequent efforts should be made to encourage or facilitate citizen stakeholders to engage in sufficiently introspective, reflective processes so as to ensure that they fully advance personally held positions.

As a further parallel between our methodology and the same project, Kohler (1999) – based on an understanding of women as consistently more concerned about animal well-being – conducted focus groups studies with 26 females and 4 males. This was similar to other investigators (e.g., Miele and Parisi (2000)). Thus, and while our recruitment criteria were expected to result in a
greater number of female than male applicants/participants (as it did), a deliberately sought or stratified gender sample was not pursued at this stage of our research.

Still, as per Vanhonacker et al. (2009b) “indications of a different degree of concern between different socio-demographic groups in society are very valuable since it gives insight into which citizen groups efforts should be addressed to alleviate public concern and improve perceptions regarding the welfare of farm animals” (pp. 21-22). Presently, however, socio-demographic data regarding citizen concerns is somewhat limited. What is available, however, is noteworthy. Contrary to presumptions perhaps, Prickett et al. (2010) report less consideration of animal welfare among USA consumers with larger incomes and more education. Correspondingly, Kendall et al. (2006) found greater concern with animal well-being among USA citizens from lower and middle income ranges and with less education. In this way, the Kendall et al, claim evidence of an empathetic or “underdog” hypothesis. In the EU, however, results of a widespread, multi-country survey about animal welfare revealed that “the EU public’s views on the importance of this subject are unrelated to social or demographic factors” (European Commission, 2007, p. 5). While Krystallis et al.(2009) reported the smallest percentage of well-educated participants among a sample deemed to be “animal welfare conscious”, Miele and Parisi (2000) reported a potentially notable finding; that consumers with different levels of formal education demonstrated differing forms of welfare related interests (i.e., more human health or consumer centric versus animal-centric).

Finally, as a further methodological decision, we did not attempt to distinguish between members of the public as “citizens” or “consumers”, nor address the often-noted discrepancy
between espoused citizen support for animal welfare and consumer purchasing habits, (e.g., Brom, 2000; Frewer et al., 2005; Krystallis et al., 2009). In short, our goal had been to elicit, heretofore, largely unknown views of some Canadian citizens in an attempt to contribute to broader stakeholder discussions going forward.

Unlike Canadian beef (Spooner et al., 2012) and pig producers (Spooner et al., unpublished data, 2103a) participants in this study were comfortable using the term “farm animal welfare”, often with reference to ethical norms and values. Virtually all equated good or satisfactory lives for food animals with access to natural environments and the ability to express natural behaviour. In general, participants supported raising animals outdoors with the freedom to behave as they desired. More specifically, they emphasized opportunities for animals to engage in natural activities such as maternal-offspring interactions. When speaking of “natural” environments, participants appeared to focus on positive elements rather than negative features such as the harsh weather and predation that tend to be emphasized by producers (Spooner et al., unpublished data, 2013b).

Participants appeared to consider animals to have intrinsic value beyond their utilitarian value to humans. In this context, many emphasized reciprocity, stressing the need for mutually beneficial relationships between producers and animals. Participants also cited a moral need to provide animals with good lives in exchange for the sacrifice demanded of them. In short, farm animals were to be recognized as sentient beings deserving of respect and appreciation beyond provision of basic care and comfort.
Notably, no participants maintained that producers were to be held responsible for subjecting animals to the welfare-related shortcomings of intensive production. On the contrary, participants – perhaps assuming that all or “real” farmers naturally wanted to rear animals extensively, perhaps on small family farms – were understanding in their beliefs that producers had likely adopted confinement production owing to market or other economic demands over which they had little control. Moreover, while participants wished for less intensive production, none wanted to see farmers or their families suffer as a result.

Participants stressed the relationship between economics and animal well-being. Most blamed poor food animal welfare on a society-wide preoccupation with profit and greed. Participants were widely critical of consumers and their quest for “cheaper food”. They were frustrated that consumers failed to comprehend or to operationalize the power that they possessed to bring about improved animal welfare through deliberate purchasing. Such assertions may represent “distancing” (Serpell, 1996) in which stakeholders – usually producers (according to te Velde et al., 2002) – attempt to cope with feelings of discomfort or guilt about contemporary care practices by shifting responsibility for enhanced welfare to others. For example, according to Harper & Henson (2001), consumers revealed a perceived lack of power to affect welfare standards, while Meehan et al. (2002) found that consumers expressed a minimal degree of perceived responsibility for animal welfare. Still, consumer-driven attempts to alter contemporary rearing practices may encounter resistance. For example, producers or industry may counter such efforts on the basis of environmental or even welfare concerns (e.g., BC Egg Farmers, 2009). Additionally, resistance may arise over concerns about short term revenue losses.
through “re-tooling”, retraining and additional labour costs along with long-term economic worries over increasingly fragmented markets.

In addition, according to some participants, food prices had been driven down to the point that animal welfare was affected. If true, then producers may require some forms of assistance or protection from market pressures that force them to cut back on welfare related practices (Fraser, 2008b) – although Appleby (2005) maintains that even small increases paid by consumers could bring about enhanced welfare. Still, one assumes that any indicated preparedness to pay higher prices based on contemporary production methods would also be interpreted as an endorsement of such practices by industry. Also, although Canadian egg producers have received much higher profit levels than U.S. producers because of the Canadian quota system (Hunton & Fairhurst, 2002), they appear not to have abandoned or enriched standard cage systems.

Numerous studies – principally in Europe – have explored non-producer views about farm animal welfare in the past decade. Despite notable cultural differences between Canada and Europe our findings agreed with European results in many respects; notably: (i) strong preferences for natural environments (te Velde et al., 2002; Miele & Evans, 2005; Lassen et al., 2006; Maria, 2006; Boogaard et al., 2008, Vanhonacker et al., 2008; Ellis et al., 2009; Krystallis et al., 2009); (ii) objections to animal suffering and/or pain associated with modern production methods (Miele & Evans, 2005; Vonhanacker et al., 2008; Phillips et al., 2009; Tuyttens et al., 2010; Boogaard et al., 2011b; Miele et al., 2011); (iii) opposition to a singular focus on animal health at the expense of natural living (Frewer et al., 2005; Lassen et al., 2006; Evans & Miele, 2007; Veissier et al., 2011); (iv) support for humane handling (Miele & Evans,
(v) preferences for small family farms (Miele & Evans, 2005; Lassen et al., 2006; Krystallis et al., 2009); (vi) strong opposition to confinement production (Miele & Evans, 2005; Lassen et al., 2006; Boogaard et al., 2011b; Miele et al., 2011); (vii) qualified support for some aspects of contemporary production (Harper & Henson, 2001; Boogaard et al., 2008; Boogaard et al., 2011a; Boogaard et al., 2011b); (viii) empathy for intensive producers (te Velde et al., 2002, Lassen et al., 2006; Vanhonacker et al., 2010; Boogaard et al., 2011b); (ix) mixed opinions regarding organics and animal welfare (Lund, 2006; Verhoog et al., 2007; Boogaard et al., 2011b); and (x) concerns related to slaughter and animal transport (Miele & Evans, 2005).

Moreover, regardless of our purposive methodology, our major findings regarding citizen views clearly reflect those of more demographically balanced qualitative (i.e., te Velde et al., 2002; Lassen et al., 2006; Evans & Miele, 2007) and quantitative studies (e.g., Vanhonacker et al., 2008). In addition, US researchers Prickett et al. (2010) found a predominance of “naturalists” – or those who emphasized natural environments – in a survey eliciting preferences about livestock production practices.

Interestingly, there was no discernible division of views between urban and rural residents. Similarly, Kendall (2006) noted that current residence variables were unrelated to attitudes about animal welfare. However, family and/or personal experience of farm animals – which varied considerably among participants – appeared to correlate with differing welfare priorities and concerns. On one hand, those most opposed to animal advocacy were found among former farm children, in keeping with previous findings (e.g., te Velde et al., 2002; Kendall et al., 2006;
Boogaard et al., 2006). On another, those with less family-related farm experiences appeared most staunchly and broadly opposed to contemporary confinement production based on philosophical principles. Beyond concerns about slaughter (expressed by those with and without farm experiences), those with a history of direct or frequent involvement with farm animals in their youth were usually more targeted in their concerns. Notably, those with first-hand knowledge of auction markets expressed major concerns about the practice (as did some beef producers in Spooner et al., 2012), whereas most other participants were likely unfamiliar with conditions at these sales. Similarly, some participants expressed intense opposition to pain associated with invasive management practices; the lack of comment from others may have reflected lack of awareness. Indeed, public awareness of piglet castration, for example, has been found to be quite limited (e.g., Vanhonacker et al., 2009a; Heid & Hamm, 2012; Tuyttens et al., 2011b; Vanhonacker & Verbeke, 2011).

In contrast to several European studies (e.g., Miele & Evans, 2005; Hall & Sandilands, 2007; Ellis et al., 2009; Vanhonacker et al., 2010; Boogaard et al., 2011a; Boogaard et al., 2011b; Miele et al., 2011), participants did not raise concerns about animals receiving natural, healthy, or organic feed. The difference may be due to recent European experiences of animal disease outbreaks attributed to contaminated feed as reflected by Ellis et al. (2009) and Miele and Evans (2005).

Participants attributed reduced welfare standards to people failing to link animal products with the animals that produce them. In response, participants widely maintained that efforts were
needed to re-establish this awareness and to facilitate a more realistic understanding among children about food products, animals and animal production.

According to Harper and Henson (2001), efforts to educate consumers are apt to encounter a barrier of “voluntary ignorance” or, according to te Velde et al. (2002), “functional ignorance”. As explained by Miele and Evans (2005) “it would seem that a significant sub-section of consumers simply did not want to know about the animal welfare conditions of the foods they were consuming.” Similar to Jolly et al. (2004) many participants also saw a need to establish an awareness of food animals among children through direct exposure to animals, preferably in conjunction with formal education. According to Jamieson et al. (2012), however, designated educational events may have limited attitudinal impact on participants.

More optimistically, participants in this study appeared to reflect what might be called realistically informed idealism. As one example, participants lauded access to natural living on one hand while acknowledging that geographic and economic factors are likely to limit the times and conditions of outdoor access. In addition and despite preferences to the contrary, a few participants acknowledged that producers need to use economies of scale in competitive markets.

Given that Canada has not witnessed the same degree of high-profile, public opposition to intensive food-animal rearing practices as in Europe or the USA (e.g., Centner, 2010), there may be more scope for dialogue between producers and non-producers on existing (and perhaps shared) values and attitudes about animal welfare, as a basis for broadly accepted policy. For example, and as with previous findings, some participants expressed a lack of knowledge about
contemporary production methods: (te Velde et al., 2002; Frewer et al., 2005; Lassen et al., 2006; Vanhonaker et al., 2008; Ellis et al., 2009), and some expressed a willingness to acquire more reliable or accurate information. Such open-mindedness may indicate a willingness to directly discuss animal welfare with those actively involved in confinement production as a basis for advancing mutual understanding.

4.5 Acknowledgements

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Chapter 5: Comparing values and attitudes of Canadian producers and citizens regarding farm animal welfare: Shared views and policy recommendations

5.1 Introduction: Farm animal welfare in Canada

Canada has approached farm animal welfare issues somewhat differently than other countries with intensive animal production. In many European states, reform has involved extensive formulation of laws and directives by national and supra-national institutions (Veissier et al., 2008). In the USA, government interventions have been less prominent but notable reforms have involved the private and NGO sectors. For example, food industry groups such as the United Egg Producers and the American Meat Institute, as well as food retailers associated with the Food Marketing Institute and the National Council of Chain Restaurants, have initiated their own welfare standards (Mench, 2008). In addition, non-government organizations have spearheaded successful voter ballot initiatives in a number of US states (Centner, 2010).

In Canada, apart from the anti-cruelty provisions of the Criminal Code, there are no specific national animal welfare regulations until after animals leave their primary production premises. Provincial and territorial governments assume authority for animal welfare through animal protection laws that vary among jurisdictions (NFAHWC, 2012). Additionally, several national producer associations support quality assurance programs that include elements of animal welfare.
Effectively, Canada has adopted a non-regulatory approach to on-farm production, involving “Codes of Practice” which serve as a basis for education, reform, and quality-assurance programs (Bradley & MacRae, 2011). National codes are developed by a multi-stakeholder process involving producers, the veterinary profession, the animal protection movement and government. Many Canadian provinces cite the codes as appropriate standards in provincial animal protection laws.

In an attempt to facilitate consensus among stakeholders, I have undertaken a multi-sector study of farm animal producers and of citizens not involved in commercial food-animal production (hereafter, “citizens”). My intent has been to identify shared values which could form the basis of constructive exchanges toward mutually agreeable care and handling practices. To this end, I undertook interview studies involving Canadian beef producers (mostly using pasture-based systems) (Spooner et al., 2012), pork producers (mostly using confinement systems) (Spooner et al., unpublished data, 2013a), and citizens with an expressed interest in farm animal welfare (Spooner et al., unpublished data, 2013b). Drawing on those reports, I was able to identify areas of agreement or partial agreement (i.e., “overlaps”) which may be invaluable in advancing efforts to facilitate more constructive dialogue – if not agreements in principle – over suitable farm animal care and handling practices. This chapter also outlines a list of policy recommendations commensurate with those shared or overlapping values. While differences of opinion were clearly found as well – and may remain indefinitely – it is hoped that these findings may be used to close gaps and engender a basis upon which to address areas of disagreement in more collaborative ways.
5.2 Areas of agreement

The three groups of participants largely agreed on the importance of humane handling and of ensuring good health and biological functioning, although producers put much more emphasis on health and functioning than did citizens. It was also widely accepted that consumers have considerable power to improve animal welfare through their purchasing habits, and that citizens have limited knowledge of contemporary food animal production processes (a lack that some citizens were willing to redress). Some citizens also readily acknowledged that producers are constrained by economic pressures in competitive markets.

Citizens and beef producers were largely in agreement that food animals should be managed in accordance with an ethic of care, and that natural, outdoor living conditions are important for animal health and well-being, although producers saw the outdoors as also entailing risks to the animals. For citizens, some beef cattle are currently shipped too far for slaughter in Canada; producers appeared to agree, if only because they considered the off-loading and re-loading of animals (required by law for long journeys) to be detrimental.

As for citizens and intensive pig producers, although citizens expressed preferences for natural living conditions, some clearly acknowledged – alongside producers – that insufficient acreage and other limitations made extensive pig rearing impossible as a norm for Canada. Both groups also agreed on the value of animal welfare science to enhance animal well-being, and both groups opposed selective or biased representations of animal production methods sometimes provided by both animal protectionists and those within the industry.
5.3 Differences

Stakeholder disagreements were most apparent in the following areas. First, unlike producers, citizens – reflecting a greater concern for affective states – felt that pain management should be provided for invasive management practices including castration, branding, dehorning and tail-docking. Second, citizens and confinement pig producers held fundamentally opposing views on the suitability of providing pigs with access to natural environments, where possible. Producers generally saw natural environments as exposing animals to disease and saw confinement as better for animal welfare because it provided better disease prevention. Citizens, alternatively, typically favoured or envisioned food animals being reared more in line with wild animals living autonomous lives in idealized outdoor settings, albeit with human care. A third and related disagreement was over the degree to which protection of biological health and functioning should take precedence over opportunities to express natural behaviour. Citizens maintained that confinement producers were pre-occupied with protecting animal health to the extent of depriving animals of opportunities to enjoy natural lives.

Additionally, citizens and pig producers maintained fundamentally different moral positions on the degree of consideration owed to food animals by humans. Citizens generally believed that because animals are killed for human use, they deserve considerable attention to their welfare. The majority of pig producers appeared to reverse this logic, seeing animals as deserving only basic care because they are raised for utilitarian purposes.

Citizens tended to see small-scale, family-owned, traditional farms as inherently good for animal welfare, and large-scale production – especially with corporate ownership – as bad for welfare.
(although citizens were divided over the welfare implications of organic production). In contrast, pig producers saw large, specialized facilities as providing a level of care that small, generalist farmers could not. Beef producers were also critical of small-scale, part-time producers whom they saw as lacking the knowledge and commitment to provide good animal care.

5.4 Subtle differences

Participants also espoused less obvious differences concerning their views on animal welfare. For many citizens, animal welfare represented an ethical obligation to provide food animals with good care and hence, was largely a moral issue. For many beef producers, animal welfare involves both philosophical issues and a set of operational goals to be met through good animal husbandry. For pig producers, animal welfare was more exclusively a pragmatic issue; specifically, good welfare was integral to productivity, and as a result, any moral considerations were assured through attention to health and growth.

As per Fraser (2008a), citizens typically reflected a Romantic worldview that values the natural and emphasizes emotion, in this case the emotions of animals including pain (i.e., with pain defined as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage” – IASP, 2013) as one of many affective states. Beef producers reflected a mixture of agrarian values that see animals as part of a natural, land-based system, and industrial values that focus on good functioning leading to productivity. Pig producers expressed more exclusively industrial values with an emphasis on productivity achieved by science and by overcoming the limitations imposed by nature.
5.5 Differing frameworks

Participants differed considerably in their level of experiences with farming, farm animals and food animal production. Among citizens, differing childhood and adult experiences with food animals appeared to influence the views and concerns they expressed. Those with little farming experience tended to express opposition to contemporary confinement production based on philosophical principles; those with more exposure to animal production were frequently more targeted in their concerns and critical at times of animal protectionism. Producer views, at least within sectors, were more consistent. It is possible that the experiential learning of being raised on a farm or ranch, plus participation in specific enculturation programs like 4-H (both initially as children and subsequently as adult facilitators), may have led to a more uniform set of values among producers.

Perhaps as a result, producers, and those citizens with farming experience, had different and more specific welfare concerns than citizens who lacked farm animal experience. Various beef producers, for instance, were critical of animal welfare at auctions (a topic mentioned by only one citizen participant who was also a hobby farmer), legally mandated offloading and reloading of cattle during rest stops, husbandry challenges associated with extensive production, and catastrophic welfare failures including animal starvation, often associated with producer illness or hardship. These concerns were not raised by citizens, presumably owing to a lack of awareness.
5.6 Paradigm differences

5.6.1 Herd versus individual animal focus

Intensive producers responsible for overseeing large operations referred to managing “livestock” in collective terms. Citizens appeared to focus more on “animals” seen as individuals perhaps because of first-hand experiences or images depicting specific animals subjected to inadequate care or abuse.

Because of this difference, producers and citizens may generally think about farm animals in larger and smaller numbers, respectively and thus may harbour different mental “denominators” when considering cases of inadequate care. For example, producers may regard deaths during transportation as representing a very small percentage, while citizens may see this as a large number of individuals.

These different frames of producers and citizens may parallel those of conservation biologists (focusing on animal collectives) and animal welfare advocates (attending to individuals) (Paquet & Darimont, 2010).

5.6.2 Disease/injury focus

A herd versus individual-animal focus was also evident in differing perspectives on animal health. Pig and beef producers typically equated animal health with an absence of illness and injury, coupled with sustained growth, and saw outbreaks of disease or injury as representing serious threats. For producers, therefore, diligent care involved adopting a preventative rather than a responsive approach to illness and injury. This was seen as justifying actions such as the
tail-docking of piglets to prevent later injuries by tail-biting, the castration of steers to prevent aggression, dehorning to prevent injuries, individual sow housing to prevent aggression-related injuries, and confinement of animals behind disease barriers.

Citizens rarely expressed concern about disease outbreaks, possibly because they were less aware of animal diseases, or possibly because of a preference to deny the idea in favour of championing the perceived benefits of natural living. More likely, however, their lack of expressed interest may have revealed a failure to link disease and suffering. In addition, citizens may have envisioned illnesses, like injuries, as problems that can be addressed on a need-be, responsive basis. If so, it is unlikely that producer attempts to defend invasive acts such as tail-docking on the basis of proactive prevention of injury will sway citizen opposition (especially given the absence of pain medications). While producers may take pride in minimizing herd illness or disease outbreaks (albeit at the expense of “short term” distress for all) citizens may look upon painful, preventative measures as representing unnecessary and inappropriate care. Notably, however, both citizens and producers may be engaged in distinct attempts to spare animals from adversity.

Failure by citizens to value disease-prevention measures may also reflect a somewhat idealized view of animal life. For example, some citizens indicated that farm animals are not naturally aggressive, and that sows would not crush piglets in natural settings. Citizens may have presumed that if animals were outdoors, nature would accommodate their needs.
5.7 **Recommendations to promote agreement on animal welfare practices and policies**

Consistent with Mellor and Stafford (2001) who champion a pragmatic incremental versus idealistic “gold standard” approach to enhanced welfare, the following recommendations are intended to help close gaps and sustain momentum toward more mutually agreeable standards.

1) **Shared terminology**: The term “Animal welfare” is seen by producers as the language of their critics. Terms preferred by producers include health, care, comfort and contentment. These terms also capture most of the concerns expressed by citizens. Therefore, re-casting the discussion accordingly could be an important step toward mutual understanding.

2) **Respecting the welfare priorities of other parties**: Producers appeared to emphasize the welfare benefits of disease prevention and down-play short-term pain (in their opinions) caused by invasive procedures. Citizens tended to do the reverse. The gap between these perspectives might be narrowed through greater recognition by citizens of the suffering created by disease, and greater recognition by producers of concerns over pain associated with routine procedures like castration. Operationally, producers and citizens might pursue joint initiatives to minimize pain associated with invasive surgeries in cases where pain management is not used because of the cost of labour or materials (including medications such anti-inflammatories commensurate with hot-iron branding) rather than a lack of available methods. Technical support could be provided by veterinary scientists and through agricultural initiatives such as the “3S” [suppress, substitute, soothe] approach to pain minimization (Guatteo *et al.* 2012).
3) **Educational opportunities:** Our findings suggest important roles for educational initiatives to help narrow differences. Many citizens acknowledged a lack of familiarity with modern farm animal production methods and, in some cases, a willingness to become more informed. Intensive producers in particular could facilitate greater public knowledge through live camera access and the use of accurate public demonstration units to offset the perception that biosecurity restrictions are intended to hide production facilities from the public. Additionally, citizens with some farm experience expressed more specific welfare concerns, similar to those of producers. Thus, facilitating constructive interaction between producers and citizens (including children) should help lead toward shared welfare priorities (FAWC, 2011). Still, education will not overturn deeply seated differences in values, for example, between those who value physical health ahead of natural living conditions versus those who embrace the opposite (Sorensen & Fraser, 2010). Moreover, references to education immediately invite important questions about authentic and trusted sources. For this reason, Algers *et al.* (2011) have called for more open access to university-based educational resources for animal welfare.

4) **Joint efforts to assist producers in difficulty:** Beef producers in particular expressed concern over failed operations which result in serious animal welfare problems including starvation and death, often because of producers with mental health problems or other hardships. While citizens are occasionally exposed to media reports of such cases, few are presumably aware of the common precipitating causes. Broad-based assistance programs, involving SPCAs, producers and social services, could allow these cases to be treated more effectively, as social problems requiring a cooperative approach. (NFAHWC, 2012).
5) **Incorporating elements of natural living into production systems:** In recognition of citizen priorities for more natural living conditions, there is scope for producers to incorporate natural elements in confinement facilities. Examples include the use of bedding and natural light plus allowing such behaviours as perching and nest-building.

6) **Collaborative testing of alternative production methods:** Much might be achieved if producers, citizens and other stakeholders could jointly participate in experimental pilot-testing of “welfare-oriented” production methods. Such projects could enable different stakeholder groups to assess the welfare benefits and costs of different practices, plus trade-offs of production costs and other factors.

7) **Clarifying the welfare implications of organic production:** Participants, including both citizens and producers, expressed differing opinions about the degree to which organic production provides good welfare. Hence, efforts by organic producers/organizations to clearly outline welfare policies and practices, including policies over the therapeutic use of antibiotics, could help to create clarity on this issue. In addition, there may be a need for broader debate about how organic production contributes to animal health and other aspects of animal welfare.

8) **Facilitating welfare-friendly consumerism:** All three groups of participants saw consumers as possessing considerable market power to dictate the availability of differentiated, welfare-friendly products through direct requests and by purchasing such products when available. Steps may be needed, however, to assist consumers to exercise this power. Seemingly, a trusted program of labelling or equivalent – so that consumers can be confident that their purchases will
directly support production systems they favour – is essential. Such programs could be
developed on small, local scales through co-operative ventures among like-minded producers
and consumers, or in accord with retail market programs (e.g., Duncan et al., 2012).

9) **Producer identification**: Complex marketing structures make it difficult for consumers to
identify the producers of the products they buy. More extensive product labelling, perhaps using
bar-codes for identification, could help to close the gap by allowing consumers to know the
source of a product and to access details about the producer.

10) **Producer professionalism**: Producer organizations might gain public trust by establishing
certification programs such as those of the United Egg Producers (2010) or Alberta Farm Animal
Care Association (2013), which members could enforce by “disciplining practitioners who fail to
meet these standards” (Sorensen & Fraser, 2010, p. 6).

11) **Integrity of information**. All groups of participants resented exaggerated claims or the
selective use of information, whether by industry or by animal protectionists (Fraser, 2001).
Citizens expressed concern over producer claims about animal friendly food production.
Similarly, while some citizens and pig producers supported the efforts of animal protection
organizations, many urged such organizations to provide factual information rather than
emotionally oriented appeals. Join support of publicly trusted educational resources, as noted
above, might help to overcome these concerns.
5.8 Conflicts apt to remain

Different views on the relative importance of basic health, freedom from pain, ability to perform natural behaviour, and other elements of animal welfare are based on different sets of values that are deeply embedded in Western culture (Fraser, 2008a). Therefore, conflicts over what constitutes a good or satisfactory life for food animals will undoubtedly continue. In particular, the tendency of producers to emphasize physical health, and of citizens to emphasize natural living conditions, has been found repeatedly in European and other research (e.g., te Velde et al., 2002; Vanhonacker et al., 2008), and is likely to remain a key area of disagreement.

Given the different values, perhaps over time two separate production streams will emerge in Canada and elsewhere, one gaining social legitimacy by emphasizing natural behaviour and environments, often on small-scale production units perhaps with a close connection between producer and consumer, and the other emphasizing the prevention of disease and injury, often in large-scale production and gaining social legitimacy through an increasingly professional approach among producers. In either case, however, social acceptance can likely be improved by ensuring that the different concerns are balanced to some degree.
Chapter 6: Conclusions, contributions and future research

As a conclusion to the thesis, this chapter provides a brief recap of the research, addresses issues of limitations and trustworthiness and reiterates the significant findings of this project and the prospective contributions to both the existing literature and current stakeholder discussions about farm animal welfare. It also outlines future research recommendations which allude to methodological weaknesses in previous studies, build upon my findings, and propose efficacious means of eliciting views on animal welfare.

6.1 Introduction

Increasing attention to the welfare of farm animals – within industrialized countries and beyond – has resulted in a proliferation of animal-welfare-related programs and policies. “Animal welfare”, however, is a complex term often reflecting a wide range of concerns about the quality of life of animals (Fraser et al., 1997). Hence, efforts to enhance welfare often entail different priorities reflecting different values and attitudes regarding good or satisfactory lives for food animals. Thus, assessment criteria for animal well-being may impose quite different requirements on production and handling methods. In turn, standards may be implemented that are contradictory and apt to create confusion in the market. Alternatively, failing to implement standards may also cause confusion as well as pressure to adopt simplistic measures and the erosion of public trust in food-animal systems (NFAHWC, 2012).

In 2005 and 2006, two extensive European studies revealed marked public interest in a more welfare-oriented food chain (European Commission, 2005; 2007). In turn, 44 institutes and
universities involving 19 predominantly European countries (Welfare Quality Project, 2009a) initiated “the largest ever European research project on animal welfare” (Blokhuis et al., 2010). During this “Welfare Quality Project” social scientists elicited public views on animal welfare through 49 focus groups conducted in seven European countries (Miele et al., 2011). In addition, multi-country studies were conducted with producers and other stakeholder members of the public culminating in an extensive body of social scientific literature reflecting European values and attitudes about farm animal welfare (Welfare Quality Project, 2009b).

In contrast, and despite an emerging presence of corporate and retail-related welfare programs and policies in Canada, extensive efforts have not been made to ascertain Canadian values on farm animal welfare. In response, the national research project reported here was undertaken to support emerging attempts to establish a comprehensive farm animal welfare system in Canada. In agreement with De Greef et al. (2006), it is preferable that solutions to multi-stakeholder conflicts be based on shared values rather than compromise. Accordingly, research was undertaken to ascertain existing values and attitudes of some Canadian producers and citizens who are not commercial producers (hereafter, “citizens”) regarding farm animal welfare. The intent of this project was to identify shared or overlapping values among participants representing plausible areas of agreement that could be used to help establish widely acceptable standards of care.
6.2 Brief recap

As noted in Chapter 5, our research revealed areas of shared values and differences. Attempts to incorporate and reflect these shared views in animal care programs may facilitate mutual agreements and help to limit confusion among stakeholders. In turn, they may also help to establish communication that might lessen inevitable conflicts.

A number of recommendations were made with the intention to narrow gaps and further facilitate mutually acceptable animal care standards. Proposals included: (i) use of shared terminology reflecting welfare priorities; (ii) promotion of collaborative stakeholder initiatives; (iii) incorporating elements of natural living into production systems; (iv) supporting welfare-friendly consumerism and shifts toward producer professionalism.

Especially between the pig producers [Chapter 3] and citizens [Chapter 4], differing welfare priorities were also identified. Consistent with European (e.g., te Velde et al., 2002; Vanhonacker et al., 2008) and US studies (Prickett et al., 2010) preferences favouring health and biological functioning within confinement operations versus more natural production practices, exist and will undoubtedly remain. Still, there is considerable value in pursuing multi-stakeholder efforts to advance animal well-being. Borrowing from Miele et al. (2011), in their comparison of respective scientific and social contributions to the Welfare Quality project:

“One big challenge remaining concerns the definition of animal welfare. This consultation showed that it will not be easy to reach a consensus on what animal welfare is and how it should be achieved/improved. Different sensibilities and preferred options
remain … however, this experience showed … how dialogue can increase trust and respect, even if ideological differences remain” (p. 116).

In these ways our research should prove helpful.

6.3 **Study limitations and trustworthiness**

This study did not seek a representative sample of research subjects. Hence, these findings may not be statistically generalized (i.e., extrapolated from this sample to other populations, Polit & Beck, 2010) beyond the participants directly involved. Extrapolation in qualitative research, however, may assume various forms (e.g., Firestone, 1993). One variation may be described as “reader generalizability” (Misco, 2007) in which results are presented to readers who, in turn, are left to make judgements and inferences about extrapolating or transferring findings to other settings (Polit & Beck, 2010). In this regard, and in conjunction with the first of our published findings to date (Spooner *et al.*, 2012), we have received positive affirmations (and no critical or dissenting comments) about our results from those employed in, or intimately familiar with, the Canadian beef industry.

Moreover, and while justified, our study employed a narrow sampling criteria. Hence, future studies may wish to purposively select for potentially significant, demographic variables including gender, educational levels, occupation, income levels, familial composition (e.g., dependents), age, pet ownership, and perhaps political or religious preferences. While other studies have explored attitudes toward animal welfare among samples reflecting these and other demographic attributes, only “gender” remains consistently significant.
In addition, our study relied upon key informants to help obtain a range of participant producers. In time perhaps, as producers become more familiar with the work of animal welfare scientists, researchers will establish more natural working relationships, and in the process, be able to pursue more direct/purposive elicitation efforts on their own.

Finally, while our study was limited to mammalian production – albeit with differing levels of intensified practices – there is certainly scope for representation from producers within other sectors, notably poultry. Similarly, there is clearly room for more involvement from members of animal protection organizations (NGOs).

Questions about generalizability or transferability in qualitative research frequently invoke questions about trustworthiness. As with generalizability, qualitative researchers may rely on various means of “validating” research findings (Mays & Pope, 1995). One of the most widely sought and reliable means of substantiating qualitative research results is through “triangulation” (i.e., reliance upon alternative forms of supporting evidence). As for this study, and despite the absence of previous Canadian research, numerous findings derived from EU projects – exploring values and attitudes about animal welfare among major stakeholders – as well as some US research, tend to support the credibility and robustness of our findings.

6.4 Research recommendations

Whether alone or in conjunction with supplemental qualitative findings (e.g., reflecting additional demographic samples or perhaps participatory observation of producers in additional sectors) it is hoped that these results may be followed by quantitative attempts to obtain a
national representative measure of the findings (e.g., via quantitative surveys using more probabilistic sampling methods). Results from such research could be used, for example, to support multi-stakeholder attempts to advance socially sustainable methods of food animal production (e.g., Swanson et al., 2011).

This project was conducted in accord with the research of Friedman and Himmelstein (2006) who, as noted earlier, assert that “deeper understanding by the parties of their own and each other’s perspectives, priorities, and concerns enables them to work through their conflict together” (p. 524). In this context, our findings may help to support attempts to raise self-awareness about held values regarding animal welfare (e.g., Benard & de Cock Buning, 2013).

6.4.1 Future citizen studies

Based on our interviews it was difficult to attain a comprehensive understanding of citizen views about animal health issues. Although citizens appear to show little awareness or concern about disease or injury, it was difficult to discern: (i) whether or to what degree citizens were aware of such threats, and (ii) the relative importance they (especially non-organic proponents) attached to preventative measures. Future studies might attempt to explore this issue more directly, while inviting participants to share their views on invasive producer practices deemed “protective” such as piglet tail-docking.

6.4.2 Future consumer studies

Producers and citizens maintained that consumers represented the most influential free-market force capable of advancing animal welfare. Consumers were regarded as possessing considerable
power to influence welfare-related production methods by “voting with their dollars” and triggering critical market signals indicating preferences for welfare-friendly foods. Some citizens, however, also emphasized that consumers were currently required to pay too little for food and that consumer demand for low prices was largely responsible for substandard animal welfare in commercial production. For this reason, it is important that future studies continue to assess consumer views about good or satisfactory lives, albeit perhaps via different methods than have been traditionally used.

To date, consumer views/values regarding farm animal welfare have been popularly assessed by behavioural economists through “willingness to pay” [WTP] studies in which participants are polled about their likelihood or willingness to purchase animal-friendly food products. Despite methodological adjustments in recent years (Lagerkvist & Hess, 2011), WTP studies are vulnerable on many fronts (e.g., Thompson et al., 2011). Chief among these shortcomings is that the consuming public is renowned for failing to support welfare-friendly food production to the degree indicated by WTP studies. This discrepancy is often called the citizen–consumer (or attitude-behaviour) gap (Grunert, 2006). To date at least, and perhaps beyond the UK (McEachern & Tregear, 2000), “people, as citizens, profess substantial concern about animal welfare but do not ‘put their money where their mouths are’ when it comes to doing something about it” (Harvey & Hubbard, 2013, p. 109).

Another tendency among social scientists has been to interchange the terms “consumers” and “citizens” when studying non-producer views about animal welfare. Participants in our studies, however, highlighted an important distinction between “citizens” and “consumers” – and in the
process – a potential short-coming in all studies that fail to reflect this critical distinction. Many of our citizen participants, for example, spoke specifically about the failure of consumers to pay (or to accept paying) a sufficient price for food animal products capable of ensuring desirable animal welfare standards during production. Similarly, some producers spoke explicitly about “customers” (i.e., people who have physically exchanged money for products at a point of purchase) rather than “consumers”. On one hand, this clearly suggests a potential difference between the criteria that some social scientists and some producers and citizens are willing to accept as operational definition of “consumers” when assessing or evaluating views about animal welfare. Whereas some social scientists may accept the self-descriptions of citizens describing themselves as “consumers” (and their retrospective accounts of how they claim to have behaved with regard to welfare related shopping in the past) some citizens and producers may demand more empirical evidence of “consumer” behaviour. In addition, any willingness to accept citizen self-descriptions as consumers, risks attaining inaccurate data for many reasons – not the least being potentially pro-social biasing (Lusk & Norwood, 2009) – which may be partially responsible for the consumer-citizen gap. Even more fundamentally, however, in a country that operates according to a free-market economy such as Canada’s (i.e., to the degree that animal welfare production criteria is at least partially determined through negotiations between buyers and sellers), food animal “consumer” views of animal welfare are most suitably measured in behavioural rather than attitudinal terms (e.g., Verbeke, 2009). In short, consumer voices are properly “heard”, and their values commensurately “voiced”, directly through their purchasing habits. In this way, for example, the non-producer participants in this study served as “citizens”.
Hence, further efforts to ascertain stakeholder values regarding animal welfare should: (i) attempt to empirically measure welfare-related consumer buying habits and; (ii) capture consumer thinking about animal welfare in relation to empirically measured buying habits. Specifically, future studies should assess welfare-related purchasing behaviour in accord with real-world acquisition decisions for evidence of explanatory factors/variables (as per Szmigin et al., 2009, albeit with a more directed animal welfare focus). Such efforts should provide insights into the tangible ways in which consumers balance competing considerations in relation to more idealistic views.

To date, however, apart from Andersen (2011) and Norwood and Lusk (2011), empirically oriented efforts to quantify and understand consumer–citizen gaps, have been limited. This is undoubtedly the result of considerable methodological challenges. For example, subjective, non-verifiable accounts of welfare-related purchasing such as Verbeke et al. (2009) and de Barcellos et al. (2011) do not qualify as empirical. Still, such methodological challenges should not legitimate reliance upon WTP-based inferences regarding consumer behaviour. In addition, and as per the aforementioned efforts to capture consumer thinking in relation to actual buying habits, future studies might assess whether – while continuing to support intensive production – some consumers might be engaged in personal forms of “strategic” buying intended to support presumably less objectionable welfare practices (e.g., buying locally to reduce animal transport distances). Alternatively or in addition, as per Holm and Mohl (2000), might consumers resort to meal “restructuration” whereby meat is relegated to more secondary roles? Moreover, as per Thompson et al. (2011), it would be useful to explore the potential influence of “cognitive biases” which may shape perceived notions about the relative value of individual consumer
contributions. Such insights could reframe traditional thinking about citizen-consumer gaps regarding animal welfare. Such research would also complement ongoing studies of consumer behaviour intended to assist animal welfare by marketing high-welfare products based on knowledge about consumer buying decisions (Ingenbleek & Immink, 2011).

Related to the notion of citizen-consumer gaps may have been the fact that citizens in particular made frequent references to those “other” than themselves (e.g., other consumers or “the system”, etc). In this way, some may have also been reproducing more of an established public discourse than expressing personal views or values. Conversely, however, a number of participants also expressed personal disappointment over their consumer or dietary practices in relation to their espoused philosophical ideals. Hence, future efforts to explore whether or to what degree some citizens may engage in “othering” around this issue may be valuable.

### 6.4.3 Future producer studies

As with consumers, producer perspectives about animal welfare should also be measured or “audited” behaviourally (i.e., via care, handling and production practices) rather than strictly attitudinally. In this study, however, requesting observational access to producer actions was considered premature. In time, however, opportunities to compare producers’ verbal expressions with their actual practices would serve as valuable adjunct – and perhaps shed light on or reveal important operational definitions of their expressed views.

According to Driessen (2012), in agreement with Thompson (1995), the central aim of most farmers is “the efficient production of food” (p. 170). In the context of this overarching priority,
however, specific animal-welfare-related behaviours may appear confusing or inconsistent. As an example, Driessen (2012) outlines the way in which decisions to dehorn cattle – or to refrain – can be justifiably defended or explained on the basis of numerous norms routinely associated with farming.

In this light, perceptions of producer inconsistency – not unlike the aforementioned consumer-citizen gap – may largely represent uninformed, inferential deductions by “outsiders”. From an animal welfare perspective, therefore, it may be as critical to ascertain individual producer “production-related” values as attitudinally idealistic views about animal well-being. Although there has been little actual research on broader producer values, the literature provides evidence that such values exist and need to be taken into account. For example, according to Kristensen and Enevoldsen (2008) and Kristensen and Jakobsen (2011), producers maintain that veterinarians lack a fundamental awareness of producer values – beyond economics – which may include team work, animal welfare, animal health, and recognition among other farmers. Burton et al. (2012) emphasize the need to foster positive human-animal interactions through broad-based attempts to manage shared belief systems on farms (i.e., “on-farm cultures”) over more specifically targeted, behaviourally directed efforts. Similarly, Leach et al. (2010) promote attempts to reduce rates of on-farm lameness through – among other triggers – appeals to producer pride in healthy herds as well as concerns about public image. Notably, reports of producer priorities involving the recognition of peers and public perception may also account for the apparent effectiveness of “benchmarking” as a potentially promising vehicle for assisting producers in improving animal care (von Keyserlingk et al., 2012). In the case of our beef participants, it was readily apparent that reducing animal stress represented a fundamental
production priority (which was also closely connected to their definition of, and attempts to ensure, animal welfare). Additional management priorities were related to lifestyle preferences plus the perception – among most commercial participant producers – of being essential food providers.

Hence, future attempts to obtain producer views about animal welfare should seek a clearer understanding of producer production or management-based values – both in conceptual and operational terms. Such efforts may reveal important insights into producer motives regarding animal care practices.

It also appeared that different producer experiences with separate production systems may have influenced producer views on welfare (e.g., with extensive beef producers and those working with group-housed pigs expressing satisfaction at being able to see animals engaged in natural behaviours). If so, this could represent an important basis for further studies on how production systems engender different views of welfare among producers. Ultimately, this sharing of views across sectors could contribute to a broader conception of animal welfare among producers. At the same time, there were clear indications that the views and values presented by beef and pig producers served to defend the logic or suitability of their own systems. As a result, these findings invite the following questions: to what degree do producer views about farm animal welfare reflect: (i) personal versus “producer” or “professional” perspectives; (ii) the effects of working with or within respective production systems; and (iii) economic or other business related priorities or “necessities”? In short, all potentially important questions for further study.
Finally, attempts to initially recruit producers from Canadian poultry sectors as well as members of “animal rights” organizations were largely unsuccessful. It is hoped, therefore, that the publication of this project may serve to illuminate or sufficiently allay concerns from prospective participants in these realms so that future studies may elicit and include their views on animal welfare as well.

6.5 Contributions to knowledge

To summarize the contributions to knowledge arising from this research, most importantly, as per the goal of my thesis, I was able to identify shared values and offer tangible recommendations capable of advancing efforts to establish mutually agreeable, farm animal welfare standards among some Canadian stakeholders. Hence, this research directly contributes to Canada’s National Farmed Animal Health and Welfare Council call for the establishment of a comprehensive farm animal welfare system reflecting Canadian values.

The research also identified areas of impasse that currently, if not indefinitely, may represent stumbling blocks toward attempts to engender mutually acceptable welfare standards. Still, such insights may assist Canadian animal welfare scientists in prioritizing areas of future research and national coordinating bodies (e.g., NFACC) in planning strategic initiatives (i.e., to build upon shared values in advance of negotiations involving more contentious issues), respectively.

Chapter 2 provides detailed insights into the welfare-related views of some Canadian commercial beef producers. Given the distinctive year-round, “cow-calf” production system used in Canada,
these findings will be of interest both nationally and beyond. Of particular importance is: (i) the emphasis that beef producers placed on outdoor access for their animals which largely matched the concerns of citizens; and (ii) the evidence we provide about producer attempts to balance human and animal welfare interests through low-stress production methods. In so doing, producers clearly evinced an ethic of care which contrasts or corrects blanket objections by critics of commercial production that all animals are treated without meaningful consideration during rearing.

Intensive pig production practices involving the use of sow-gestation stalls, tail-docking and farrowing crates have been the subject of increasing public opposition in North America. This research – in giving voice to commercial pig producers – reveals and contributes detailed, welfare-related perspectives underlying the use of these practices.

A further contribution of this research involves the lack of focus by citizen participants (with an a priori expressed interest in farm animal welfare) on the welfare threats posed by prospective injuries or animal disease outbreaks. Whether the result of ignorance – which may be amenable to correction – or outright lack of concerns, our findings may serve two important functions: (i) to provide support for preliminary evidence of this phenomenon reported elsewhere (Prickett et al., 2010); and (ii) to correct an apparent misconception among producer participants about citizens wanting producers to maintain current/lavish levels of health care protection while also providing natural access and accommodating affective state concerns (i.e., referred to as “wanting everything”). Furthermore, the fact that citizens looked upon routine invasive
management practices as inflictions only, may represent an important basis for future stakeholder discussions.

Based on participants’ views, producers and citizens tended to focus on animal welfare concerns at group/herd and individual levels, respectively. This insight could facilitate more mutually productive exchanges between stakeholders by encouraging the framing of welfare-related conversations in both group/herd and individual terms.

Participant producers and citizens gave some indication of differing levels of significance attached to specific individual cases of inadequate care. Based upon the potential of producers and citizens to think about farm animals in larger and smaller numbers, respectively differing reactions to episodic cases may also reflect differing mental “denominators” responsible for inferences made on the basis of such cases (i.e., with citizens inferring that many/“millions” of animals are likely subjected to similar experiences and producers insisting on the relative rarity of such examples). Like the herd-individual distinction above, this insight could help respective stakeholders to better understand how others frame the issues.

Both citizens – and especially producers – made distinctions between “citizens” and “consumers” based on food purchasing activities or behaviours (i.e., with consumers defined closely in accord with “paying customers”). Hence, it is unlikely that producers in particular will readily accept research results which claim to represent “consumer”-related welfare views or preferences based on studies using participant recall or projected food purchasing intentions (i.e., “willingness to pay” studies). Commensurately, future welfare-related consumer studies should
attempt to use more empirical data-gathering methods when reporting on consumer related practices regarding farm animal welfare purchasing – a goal which would be made much more attainable through the inception of widespread, reliable food animal product labelling.

6.6 Conclusion

According to Swanson et al. (2011), “Animal welfare assessment is truly a wicked problem. There is no single accepted operational definition of animal welfare partly because animal welfare can be evaluated from several different ethical perspectives or combinations of those perspectives (Fraser, 2003).” As revealed by this study and others, the “wickedness” of these disputes are partially comprised of fundamental socio-cultural forces which resist or challenge attempts to establish mutually agreeable standards. Hence, differing conceptions of animal welfare exist and may remain indefinitely. Understandably, these differing conceptions may be seen as in conflict, especially by those who seek a single, perfect system of animal welfare. These differing conceptions may be seen as more complementary, however, if they are mutually able to support the infusion of welfare enhancements into different production methods (e.g., introducing more natural elements into confinement systems and more health considerations into extensive production). It is hoped, therefore, that attempts such as mine to identify shared values present within differing conceptions of welfare may aid in efforts to harmonize respective views about good or satisfactory lives for food animals.
References


European Commission. (2007). *Attitudes of EU Citizens towards Animal Welfare, Special Eurobarometer 270*. Available at:


Appendices

Appendix A  Interview questions

1. [Public]

To begin, I would like to ask you some background questions to give me a better understanding of your experiences.

- Do you currently live in an urban or rural community?
- How long have you lived in this type of community?
- Have you ever lived in another type of community?
- How often have you visited a farm?
- Have you ever worked on a farm? If so, what type of farm, when and for how long?
- Do you or have you actively participated in efforts to improve the lives of farm animals (For example, are you an active member of an advocacy organization such as the SPCA)?
- How would you identify yourself with respect to diet? (e.g., “vegetarian”).

[Farmers/Producers]

To begin, I would like to ask you some background questions to give me a better understanding of your experiences.

- How long have you been a farmer/producer?
- Do you have a family history of farming?
- Have you been involved in other types of farming/producing beyond your current activities?
- Do you enjoy farming? If so, what aspects?
- How would you identify yourself with respect to your diet?

2. Over the last 20-30 years, the term “animal welfare” has been used more frequently by people from all walks of life. In this study, we are asking people to talk about “farm animal welfare” in more detail.

When you hear or use the term “farm animal welfare”, what does that mean or entail to you? Can you explain what the term farm animal welfare means to you? (even beyond own sector)

- You mentioned [X], why are those important to you?
- Are there other aspects that you consider important to the welfare of farm animals?
- Are there any elements that you feel are more important than others?
- Limits, e.g. are there any uses or particular practices related to farm animals that you consider unacceptable?
3. [Farmers/Producers]

We are about to discuss care and handling in “real world”/economic terms. But beforehand, we would invite you to suspend reality for a moment (so that money, regulations or consumer pressures are not an issue).

Can we ask you to imagine how you would design your own welfare-friendly operation, from start to finish, from an animal’s perspective (i.e., in general terms)?

(e.g., imagine you are an animal in your operation).

**OPTIONAL [All]**

If you were invited to assess a farm animal operation from an “animal welfare” perspective, what would be the most important indicator to you that:

- The animals involved were being subjected to good animal welfare practices (i.e., good care)?
  - Could you explain why you have chosen “x” as the indicator?
- The animals involved were being subjected to poor animal welfare practices (i.e., poor care)?
  - Could you explain why you have chosen “x” as the indicator?

4. [Farmers/Producers]

- What (if any) do you regard as AW challenges with your sector/industry?
- What (if any) welfare concerns have you heard raised by members of the general public and how have you replied?

**OPTIONAL**

Have you ever encountered anyone who held views about welfare practices which differed from your own?

- If so, how have/did you respond?
- What (if anything) might they have been overlooking / were misinformed about?

5. [Farmers/Producers]

Here is a list of concerns that we have heard raised. Are there any others here that you may have also encountered and perhaps answered or addressed along the way?
**Industry Specific Questions**

“Common Welfare Related Concerns – Beef”


“Common Welfare Related Concerns – Pig”

1) Castration 2) Tail-docking 3) Teeth-clipping 4) Gestation stalls 5) Farrowing crates 6) Indoor rearing 7) Unable to perform natural behaviours

**OPTIONAL**

*How close do you feel you come to maximizing the “performance potential” of each of your animals?*

- If less than 100%, why would that be?
- Are there other/competing goals involved that might compromise/reduce performance?

6. We hear the term “happy animals” used by both members of the public and farmers/producers.

- Do food animals have the capacity to be happy (i.e., experience pleasure)?
- If so, can you explain what the term “happy animal” means to you?

**OPTIONAL**

*How closely are the emotional ‘needs’ of animals tied to their biological functioning (health)?*

7. [Farmers/Producers]

One observation that we have made in our interviews with members of the public is that when they speak about animal welfare, they say they understand the importance of good health, but are worried that in farming today, the emotional needs of animals are not being met.

- How would you respond? (e.g., allowing young animals to play together).

8. [Farmers/Producers]

Since you have been farming/producing, have you implemented any changes in your farm animal care practises?

- Compared to your predecessors? If so, what are they? What was your motivation to change?
• In the course of your own career? If so, what are they? What was your motivation to change?

(Where or from whom did you learn this/these?)

9. [Public]
How would you describe the nature of the emotional relationship that a farmer feels for his/her animals?
• What do/would you like it to be?

OPTIONAL

How would you describe the nature of the emotional relationship that you or others might have with your/their pets?

10. [Farmers/Producers]
I wonder if you can shed light on an issue which I don’t think is well understood by urban residents; the nature of the farmer-animal relationship.

Can you explain that relationship in a way that an urban resident might be able to understand: specifically, those who might see a farm animal as potential pet or a large animal that they might grow to care about/love, and wonder how a farmer is able to load these animals onto a truck and say “good bye”.
• How does this differ from one’s relationship with one’s pet(s)?
• Have you ever thought (or do you have any thoughts) about the welfare of pets living in cities?

11. We thought it would be helpful to talk about a specific farm animal practise with which most people would be familiar. We have chosen the transport of animals.

[Public]
• Have you ever seen farm animals being transferred in vehicles?
• If yes, how did you feel or react to seeing this? What went/goes through your mind?

[Farmers/Producers]
• What are your thoughts about animal transport from an AW perspective?
• What do you feel is the maximum distance your animals should be shipped at one time?
• How far are your animals shipped?
• How long should cattle go without food or water during transportation?
• How long do your animals go without food or water?
• Do you know where they (ultimately) go?
• Would you like more control over how far and where your animals go?

12. [Public]
We would like to shift slightly by asking about your background as it relates to your current views.
• Returning to your perspectives on animal welfare, have you always held these views?
• Have you ever held a position other than the one you hold today?
• How did you come to this/these positions?
  o Was there a particular event/memorable incident/book that shaped your thinking?
  o Were there any role models/mentors that were particularly important to you?
• Have you ever encountered views about welfare that differed from your own?
• If so, how have/did you respond?
• What (if anything) might they have been overlooking / misunderstood?

13. [Farmers/Producers]
“Animal-Friendly” food products are increasingly common in supermarkets. These products are labelled as “free range”, “free run”, “pasture fed” among others. These products suggest an interest in farm animal welfare and that consumers are seeking some assurances that animal welfare is being safe-guarded.
• What do you think about these types of products?
• In your opinion, what do you think is the best way to assure consumers that their welfare concerns have/are being addressed?

14. [Public]
As a consumer, do you purchase food animal products?
If no:
• Could you envision a situation under which you would be willing to purchase food animal products for yourself?
• What about for others who are willing to purchase food animal products?
If yes:
“Animal-Friendly” food products are increasingly common in supermarkets. These products are labelled as “free range”, “free run”, “pasture fed” among others. These products suggest an interest in farm animal welfare and that consumers are seeking some assurances that animal welfare is being safeguarded.

- Do you purchase any of these types of products?
  - If so, why? If not, why not?
  - In relation to animal welfare concerns, can you describe your food shopping experience?
    - For example, is it an enjoyable experience, is it frustrating, is it compelling/inspiring?

If frustrating (perhaps because not enough options available), would you expect that if more options became available you would purchase (all of) these products?

- What about other ways of shopping beyond the supermarket. For example, do you ever purchase directly from farmers?
  - If so, why?
  - On what basis do you make a welfare connection?

- As a consumer, do you ever feel that you are being asked to absorb a disproportionate amount of the cost for animal welfare products?

15. Moving on to the bigger picture … we are interested in your views about the role that others can or should play in discussions around farm animal welfare.

What role do you think the following groups can or should play in discussions around farm animal welfare? (e.g., who should be at the “negotiating table” or not, and what role should they play?)

- Consumers?
- Farmers?
- Animal advocates?
- Government?
- Industry groups? Food industry?
- Media?
- Others who you think should be involved? (e.g. vets, feed reps, equipment suppliers)
16. [Farmers/Producers]
   - Do you feel that you are fairly compensated for the work you do?
   - If not, then who is not bearing sufficient responsibility? (consumers, processors, others?)
   - If not fairly compensated financially, do you receive any other types of social recognition that you find rewarding or satisfying as a farmer/producer? If so, what?
   - If you were to win a lottery tomorrow, would you continue farming/producing?
   - If so, would you do anything differently and what (especially from an AW perspective)?

17. [Public]
   - If you could imagine, what would your ideal animal-related society look like to you?
   - In light of that, what is a/your first step in that direction?

**Conclusion of Interview**

- Is there anything that we have not discussed which you consider important?
- Do you have any other comments, suggestions or perhaps questions you think we should ask other participants?
- Would it be possible to contact you again if we need further clarification on issues arising in this interview?

**Thank you for your generous participation in our study.**
Appendix B  Animal welfare attribute list (Supplement)

| ☐ Express natural behaviours of species | ☐ Social contact between social animals |
| ☐ Access to natural environments | ☐ Contact between mothers and young |
| ☐ Natural diets for species | ☐ Autonomy - choose social groups |
| ☐ Natural lighting | ☐ Natural mating vs Artificial insemination |
| ☐ Variable weather | Additional _________________ |
| ☐ Fresh air | |
| ☐ Ability to explore diverse environments (not necessarily natural) | |

| ☐ Good digestive functioning supported by good diet | ☐ Freedom from injury e.g. lameness |
| ☐ Control of parasites | ☐ Freedom from infectious diseases e.g. vaccinations, good air |
| ☐ High rates of growth | ☐ Freedom from predators (i.e., security |
| ☐ High rate of production (milk, eggs) | ☐ Cleanliness of animal/conditions |
| ☐ High reproductive rates | Additional _________________ |
| ☐ Long life expectancy | |

| ☐ Happiness/Pleasure (play) | ☐ Freedom from stress, distress, discomfort, suffering |
| ☐ Boredom | ☐ Freedom from hunger or thirst |
| ☐ Comfortable temperatures or thermally comfortable | ☐ Freedom from loneliness |
| ☐ Diet the animal prefers | ☐ Freedom from fear |
| | ☐ Freedom from pain (induced by management procedures) |
| | Additional _________________ |