

Will work for food: agricultural interns, apprentices, volunteers, and the agrarian question

Michael Ekers¹ · Charles Z. Levkoe² · Samuel Walker³ · Bryan Dale³

Accepted: 25 August 2015

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Abstract Recently, growing numbers of apprentices, and volunteers are being recruited to work seasonally on ecologically oriented and organic farms across the global north. To date, there has been very little research examining these emergent forms of non-waged work. In this paper, we analyze the relationships between non-waged agricultural work and the economic circumstances of small- to medium-size farms and the non-economic ambitions of farm operators. We do so through a quantitative and qualitative analysis of farmers' responses to two surveys we conducted of farmers using non-waged workers in Ontario, Canada. We situate our analysis within debates on the agrarian question, which we contend requires an account for both the economic and non-economic dimensions of new forms of non-waged work on farms. We suggest that many ecologically oriented farm operators are struggling financially and report low gross on-farm revenues and personal incomes. We argue that in addition to relying on off-farm incomes and self-exploitation, many farms are managing to persist in a challenging economic climate through their use of intern, apprentice,

and volunteer labor. However, we also suggest that the growth of non-waged work on farms is not simply being driven by economic processes but also a series of non-economic relationships focused on non-institutional farmer training, the pursuit of sustainability, and social movement building. We suggest, the "economic" and "non-economic" dimensions of internships, apprenticeships, and forms of volunteerism sit uneasily alongside of one another, generating questions about the politics, ethics, and sustainability of non-waged work and ecological farming.

Keywords Agrarian question · Apprentices · Ecological agriculture · Ontario · Interns · Non-wage labor · Volunteers

Abbreviations

CAS Community supported agriculture NFU National Farmers Union

☐ Charles Z. Levkoe charles.levkoe@gmail.com

Michael Ekers mekers@utsc.utoronto.ca

Published online: 17 October 2015

- Department of Human Geography, University of Toronto, Scarborough, Social Sciences Building, 1265 Military Trail, Toronto, ON M1C 1A4, Canada
- Geography and Environmental Studies, Wilfrid Laurier University, 75 University Ave. West, Waterloo, ON N2L 3C5, Canada
- Department of Geography and Planning, University of Toronto, Sidney Smith Hall, 100 St. George Street, Room 5047, Toronto, ON M5S 3G3, Canada

Introduction

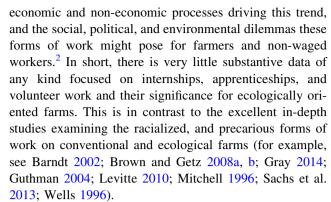
Over the last decade, there has been an explosion of non-waged seasonal internships, apprenticeships and short-term volunteer positions on small- and medium-size ecologically oriented farms across Canada, the United States (US), and Western Europe. Although unpaid family labor has historically been a central feature of many farming operations, there is a growing trend of non-family members working seasonally outside of a formal wage relation. In a typical non-waged farm internship, individuals provide their labor with little or no monetary compensation, but are often given some combination of training, accommodation,



meals, and a small stipend in return. These internships are growing increasingly prevalent on small- and medium-size ecologically oriented farms¹ that adhere to a wide range of ecological principles in their design and management of food production.

On-farm internships, apprenticeships, and volunteer experiences are increasingly a hot-button issue among farmers, activists, and organizers within "food movements" and the agricultural sector. In part, this stems from the uncertain legality of non-waged labor arrangements, especially after a 2013 case in British Columbia, Canada, where two non-waged farmworkers submitted a formal complaint to the Ministry of Labor claiming that their work arrangement did not meet provincial employment standards and were awarded several months' worth of back wages (Yanko 2013; there have also been similar cases throughout the US). In another telling case, WWOOF, the international volunteer farm network, decided to change the meaning of the association's acronym from "Willing Workers on Organic Farms" to "World Wide Opportunities on Organic Farms." The change came from concerns about using the word "workers" and ways it might be perceived as contrary to labor regulations set by various governmental authorities in affiliated countries (see Yamamoto and Engelsted 2014). Beyond these cases, in both Canada and the US legal debates are underway examining the legality of unpaid internships in the context of deep agricultural exceptions to labor laws that exist across North America (Endres et al. 2010; Endres and Armstrong 2013; Hamilton 2011; Kalyuzhny 2012). Furthermore, farmers and rural activists have begun to debate the ethics and politics associated with farmers' use of intern labor and the absence of a formal wage afforded to interns. These debates have included the viability of internships as a means of farmer training, the potentially exploitative character of non-waged work, and the longterm sustainability of such a model for on-farm labor (for example, see Marr 2012a, b).

Given the proliferation of new forms of non-waged work on farms and the popular and legal debates regarding this work, it is surprising that this growing issue has not garnered more scholarly attention. What literature does exist focuses on travel and leisure (McIntosh and Campbell 2001; Miller and Mair 2014) and new farmer training (McIntosh and Bonnemann 2006; Kalyuzhny 2012). However, we lack substantive research on the scale of internships, apprenticeships and volunteer positions, the



In this paper we seek to provide a sustained empirical and theoretical account of the scale and manifestation of farm internships in Ontario, Canada, and the co-mingling of economic and non-economic factors at play in the growth of non-waged work and the contradictions therein. We report on the results of two provincial-wide surveys conducted in 2014 and 2015 of farmers utilizing intern, apprentice, and volunteer labor in Ontario, Canada. We outline and discuss the reliance of producers on non-waged labor, which has allowed many farms to reproduce themselves despite being largely unprofitable. We argue that the reliance on non-waged labor in the ecologically oriented farming sector should be understood as a contemporary negotiation of the agrarian question, which focuses on how petty commodity producers are able to persist within a dominantly capitalist farming sector and the associated competitive pressures they face (Kautsky 1988 [1899]; Guthman 2004; Akram-Lodhi and Kay 2010a; Bernstein 2010). Galt (2013, p. 346) suggests that "the reserves of resistance" that allow marginally profitable community supported agriculture (CSA) farms to exist "include the ability to self-exploit, including [through] 'underconsumption,' or forgoing the basic needs of the individuals in the family." To this, we suggest that enrolling interns, apprentices, and volunteers on farms represents another means—or temporary negotiation of the agrarian question-through which ecologically oriented farms can survive in the context of an industrialized and corporatized agricultural sector.



¹ In this paper, we use the term "ecologically oriented" to refer to farms that adhere to a wide range of ecological principles in their design and management of food production, and that have adopted various philosophical and practical applications of technical, generational, and experiential knowledge (e.g., agroecological, biodynamic, certified and non-certified organic, natural, permaculture, etc.).

² We use the term "non-waged labor" and "interns" (as well as apprentices and volunteers) interchangeably in this paper to refer to farmworkers that are not immediate family and are compensated for their labor in ways that can be described as non-conventional and quasi-legal. For example, non-waged farm workers in Canada are frequently considered interns, apprentices, and volunteers and are paid less than minimum wage. However, at times they are treated as employees insofar as contributions are made to Employment Insurance, the Workplace Safety and Insurance Board, and the Canadian Pension Plan. In other cases, farmers have more informal relationships with their non-waged workers, in which the legal requirements of the Employment Standards Act (in Ontario) are not

However, we also argue that the emergence of internships on farms cannot simply be understood as a narrow "economic" issue as this growing phenomenon is partially being driven by a series of non-economic relations that include a non-institutionalized approach to farmer training and the pursuit of environmental sustainability and alternative modes of food production. In advancing this argument we build on studies of alternative agriculture, which suggest that although farms are entangled within a broad set of political economic processes, such forces are mediated through a series of non-economic relationships that shape production practices in ways that create both opportunities and challenges for progressive forms of ecologically sustainable agriculture (Buck et al. 1997; Brown and Getz 2008a, b). We argue that the co-mingling of economic and non-economic motives and relations creates a series of contradictions that farmers and interns must negotiate around the effectiveness and dependability of interns, apprentices, and volunteers, associated ethical and political questions, and the challenge of interns accessing land in their drive to continue to farm in the absence of a substantive wage.

We begin by elaborating on our contribution to the literature and our understanding of the agrarian question. Next we discuss the methods underpinning this study. We then present a brief discussion of some general trends in the Ontario agricultural sector, which acts as a foil for our discussion of some of the counter-trends among our sample population of ecologically oriented farms. Reporting on the results and our analysis of our survey data and comparing them to broader provincial trends, we provide a quantitative context regarding the types of farms making use of non-waged labor. Next we examine the dependency of farmers on intern labor and their motivations for bringing non-waged workers onto to their farms. We close the discussion by examining the contradictions and dilemmas that interns, apprentices, and volunteers pose for farmers and the farm sector.

Farm work and the agrarian question

Finding and maintaining dependable farm labor presents a challenge for farm operators due to the intensive labor required for small- and medium-sized farming (e.g., limited mechanization), and the nature of farm work (e.g., seasonal fluctuation, long hours, physical labor, specific skills and knowledge requirements, and negative cultural attitudes). Further, the low profit margins from fresh produce and livestock (Qualman 2011; Wiebe 2012) can make it difficult to employ workers on a full-time basis. In attempts to find reliable and "affordable" agricultural labor, many farmers have sought support from state-led temporary

migrant worker programs and have hired undocumented workers. The historical roots of these practices and precarious conditions of the workers are increasingly being documented and critiqued (see for example Estabrook 2011; Gray 2014; Holms 2013). Some farmers and many industry groups have been at the forefront of exerting downward pressure on farm wages and advocating for continued agriculture exceptions to labor law, health and safety regulations, and collective bargaining (Faraday et al. 2012; Mitchell 1996, 2012).

As Margaret Gray (2014), among others (Guthman 2004; Press and Arnould 2011) have suggested, agrarian imaginaries emphasizing bucolic family farms and the assumed virtues of local food often hide the precarious, migrant, and racialized labor that underpins organic food production. This point also possibly holds true in the context of intern labor, which is largely obscured by images of small organic farms and the imagined "families" running these operations. And although many farmers are very upfront about the pivotal role that non-waged workers play on their farms, there is little public knowledge of these work arrangements. However, to fully understand the growth of non-waged internships on farms, we suggest that it is necessary to engage with debates on the agrarian question that highlight how precarious family and peasant farms manage to reproduce themselves despite normative expectations of their decline.

The agrarian question, as Kautsky (1988 [1899]) initially wrote, involves accounting for the persistence of small-size farms in the face of capitalist-led industrialization and the significance of this phenomenon for socialist and communist political projects (also see Bernstein 2009). Although we cannot do justice to the extensive and varied approaches to the agrarian question in the confines of this paper, we want to signal several points that are germane to our argument (for useful summaries of these debates see Akram-Lodhi and Kay 2010a, b; Bernstein 2009, 2010; Deere 1987).

Many accounts of agrarian production highlight the difference that "nature" makes in the capitalization of agriculture and the adoption of wage-labor in the sector (Mann and Dickinson 1978; cf. Henderson 1999; Kautsky 1988 [1899]). As Mann and Dickinson (1978, p. 465) suggested in a seminal piece, non-capitalist farms (which they describe as "family labor farms") in which there is no clear separation between capital and labor, "continue to exhibit a remarkable vitality precisely in those countries where the capitalization of industry has progressed the furthest." They argued that distinctions between working time and production time associated with agricultural production have resulted in farmers relying on creative forms of labor recruitment, retention and compensation as they seek to meet their variable and seasonal labor



demands (see also Errington and Gasson 1994; Henderson 1999; Mitchell 1996, 2012). Many of these issues and processes are at work on both "conventional" and ecological farm operations but, as Buck et al. (1997) suggest, ecologically oriented farms have unique production demands as labor is used to complete many tasks such as pest-control, weeding, and composting that are accomplished by chemical inputs in the conventional agriculture sector. In this respect, labor needs on ecologically oriented farms are more intensive than on conventional farms, which makes the "labor question" even more important.

The agrarian question is not simply about how the specificities of nature shape on-farm production process, as attention is paid to the social relationships that shape farm operations. To be more specific, numerous scholars have suggested that the perseverance of family farms stems from the endurance of non-commodified labor and the persistence of the peasantry (Akram-Lodhi and Kay 2010a; Bernstein 1979; Friedmann 1980; Goodman and Redclift 1981). The central point of this debate is that peasant and family farms are able to exist alongside their industrialized counterparts because of their use of familial and community-based labor, and through self-exploitation (Friedmann 1978; Shanin 1973; Thorner 1986). Feminist interventions have focused on women's unpaid and domestic labor on farms, which has allowed for the social reproduction of those farms and the farm families (Collins and Gimenez 1990; Friedmann 1990). More recently, Galt (2013) has suggested that CSA farmers in California navigate the agrarian question through processes of self-exploitation that is partly driven by an ethical commitment to alternative agriculture and a sense of obligation to their members. These bodies of literature illustrate that inherent to the agrarian question is the comingling of political economic processes with relations of gender and kinship situated within a broader moral economy. To this literature, we add the issue of non-wage labor to the debate revolving around the reproduction of farms through both economic and noneconomic means. Our findings confirm some of Galt's and other's conclusions about the importance of self-exploitation, but we also stress how farmers are negotiating the agrarian question through a reliance on non-waged interns, apprentices, and volunteers.

The final point we want to highlight from the literature is that many small- to medium-size farms are not seeking a return on a significant outlay of capital, which is perhaps a phenomenon somewhat unique to the agricultural sector.³ The literature discusses how some farmers tend to be most

³ It is possible to overstate the uniqueness of agriculture, as many small businesses have both social and environmental motives that they attempt to support through their marginally profitable business operations.



concerned with annual and generational reproduction, which allows such operations to survive on much slimmer profit margins than would be possible in the conventional agricultural sector (Chayanov 1966 [1924]; Scott 1976; Van der Ploeg 2013). However, Friedmann's (1978) early work suggests that unpaid work on farms, and specifically kinship labor, was not simply a means of reproducing the farm in the face of market pressures, but also allowed specialized household wheat producers to outcompete larger and explicitly capitalist farms. While it is true that nonwaged labor on farms cuts both ways, the specific functioning of non-waged labor—as a means of reproduction or as a competitive advantage—will partially be a historical and empirical question. As we suggest below, in the context of alternative agriculture in Ontario, non-waged internships is one of the principal means through which marginally- or non-profitable farms are reproducing themselves.

To summarize, the agrarian question entails accounting for the specificity of nature-based forms of production and the unique forms of labor performed on farms, including unpaid family and community work and the self-exploitation of farmers. Here we want to flag that the rise of nonwaged work on ecologically oriented farms is no aberration but rather reflects a history of non-commodified labor on farms. It is our contention that, despite this enduring phenomenon of non-waged agricultural work, current trends reflect a contemporary manifestation of the agrarian question in which interns, apprentices, and volunteers represent a source of non-commodified labor that allow farms to reproduce themselves and establish a niche within the broader agricultural sector.

Methods

This study is based on two online surveys that we conducted between December and March in 2013-2014 and 2014-2015 that targeted small- and medium-size ecologically oriented farms in Ontario using non-waged labor. With over 50,000 farms in Ontario, we elected to focus on farms that were using non-waged labor instead of establishing a representative sample of all farms in Ontario, which we judged as prohibitively time and resource intensive. In this respect, our study has focused on nonwaged workers in a specific segment of agriculture rather than throughout the entire sector. Survey respondent recruitment was both targeted and based on open invitations. We sent the survey to a list of 240 CSA farms in Ontario (retrieved from http://csafarms.ca). Additionally, the surveys were distributed through a number of listservs hosted by non-profit organizations that focus on training new farmers and facilitating non-waged farm experiences.

While some farms received the survey multiple times, the final data was adjusted to include only one entry per farm (taking the most complete response). In total we received 200 unique responses, of which 139 were complete. We also drew statistical data from the Canadian Census of Agriculture to augment our own data set and compare responses to our survey with broader trends in the agricultural sector.

The surveys were comprised of a mixture of closed and open questions. Closed questions focused on: (1) collecting information about farm characteristics (on- and off-farm income, farm size, types of farm production and marketing strategies etc.); (2) the different types of workers on farms ("temporary foreign workers," workers receiving at least minimum wage, workers receiving less than minimum wage, and non-waged workers) and the identity of workers as reported by farmers; and (3) whether or not farms were dependent on non-waged workers. Open questions focused on: (1) the benefits and challenges associated with using non-waged workers; (2) the reasons for being dependent, or not, on non-waged workers; and (3) farmers' perspectives on whether they would be willing to pay workers a minimum wage if they had the financial resources.

Quantitative survey responses were analyzed by producing descriptive summary statistics to provide an aggregated account of the scale, prevalence, characteristics of farms and non-waged work on farms, and the question of dependency. Our quantitative analysis is based on farmers that use non-waged workers and a smaller number of respondents that completed the survey that do not have non-waged workers on their farms (n \sim 29). We performed correlations between responses related to farm size, annual gross revenue, personal on- and off-farm income, and the number and percentage of different types of waged and non-waged workers. We also completed t tests to determine if the mean values for variables were statistically significantly different between those that self-reported dependency on non-waged labor and those that did not. Finally, qualitative survey responses based on open-ended questions were coded and organized into emergent categories based on commonalities between the responses.

Setting the scene

To begin, we want to signal several key trends in the Ontario agricultural sector, which provide a backdrop for some of the developments on ecologically oriented farms that we discuss. The pattern for decades in Ontario has been one of consolidation of small farms by (and into) larger, more heavily capitalized farms. This pattern is consistent with trends taking place throughout Canada (Qualman 2011) as well as in the US and many other

countries (Weis 2007). To take just a 20-year period, from 1991 to 2011, the number of Ontario farms smaller than 560 acres decreased nearly 28 % while those 560 acres or larger increased over 23 % (Statistics Canada 2011a). The number of farms making <\$500,000 in annual gross farm receipts (all currency in CAD) decreased nearly 30 %, whereas those taking in \$500,000 or more nearly doubled (Statistics Canada 2011b).

Aggregated data indicates that Ontario farmers face serious financial challenges. For example, on average they are spending 84 cents in expenses for every dollar of receipts (Statistics Canada 2011c). The National Farmers Union (NFU) (2011, p. 11) points out that Ontario farmers' incomes from the market are not only low but are actually falling, stating that, "[a]djusted for inflation, the realized net farm income today is less than it was during the Great Depression." These financial challenges can be attributed to rising costs of agricultural inputs (such as fertilizers, fuel, and seeds), stagnating farm-gate income and retailers capturing an increasing amount of profits that have come with rising food prices (NFU 2011; Statistics Canada 2011c). This "cost-price squeeze" is having a detrimental impact on farmers' livelihoods worldwide, and is a common feature of the contemporary global food economy (Weis 2007), compelling farmers to "get big or get out" of agriculture. Yet, as the NFU (2011, pp. 11–12) argues, Ontario farmers who remain small also face inequity in terms of government program payments disproportionately subsidizing larger farms.

These trends are paralleled by increasing debt loads among farmers, with Canadian farms on average facing a 1:23 ratio of net dollars earned to dollars owed in debt (NFU 2010). The systemic pressures to scale up mean that farm operators are often forced into debt, incurring not only hefty operational costs but also increasing capital costs, as they must purchase expensive farm machinery and larger parcels of land on credit to remain competitive. High prices for arable land in Ontario, brought about through urbanization and financial speculation, mean that not only are large-size farmers going into debt, but smaller-size operators are being driven out of farming altogether. In light of the consolidation and capitalization of agricultural in Ontario, it is important to explore how a new generation of small- to medium-size farms are emerging given the conjunctural challenges they face in the agricultural sector. With these contextual considerations in mind, we turn to our survey results on the use of non-waged work in Ontario agriculture.

Farm characteristics

Overall, the farms in our sample diverged significantly from the average Ontario farm (see Tables 1, 2). In terms



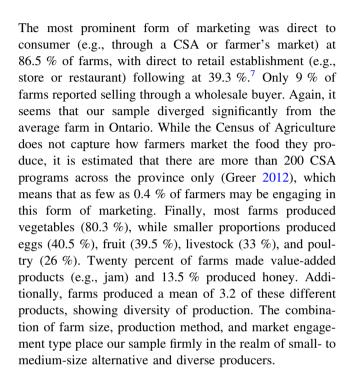
Table 1 Farm descriptive statistics

	n	Minimum	Maximum	Mean	SD
Farm size (acres in cultivation)	153	0	950	68.9	125.1
Approximate annual gross farm revenue	146	0	\$1,800,000	\$94,786	\$188,667
Personal net on-farm income	136	-\$15,015	\$100,000	\$13,629	\$17,641
Personal net off-farm income	111	\$0	\$250,000	\$30,012	\$42,020

of farm size, the mean cultivated area was 69 acres, with the maximum being 950, showing the relatively small size of these operations. Comparatively, across the province there are only 29.7 % of farms that are 69 acres or smaller, whereas 16.4 % of farms are over 400 acres (Statistics Canada 2011a). Of farms in our sample, 16.8 % had free or non-traditional arrangements for access, while 15.7 % rented and 67.5 % owned—the majority (73.2 %) of owners being sole proprietors. This pattern actually reflects province-wide statistics, as 67.1 % of the total acreage is owned, whereas the remainder, 32.9 % of Ontario's farmland, is rented or leased from others (Statistics Canada 2011d); however this data does not account for "non-traditional" arrangements that are not investigated through the Census of Agriculture.

In terms of production methods, about 60 % of the farms in our sample were non-certified, but practicing ecologically oriented methods, including agroecological, biodynamic, permaculture, and organic farming. A figure of 21.7 % had a recognized certification, with the majority thereof being certified organic; 14.5 % identified as practicing other kinds of agriculture, while just under 4 % employed conventional methods. Our sample therefore had a much higher proportion of organic certification compared to Ontario farms generally, of which 1.5 % (or 774 farms) is certified organic or "transitional"⁵ (Statistics Canada 2011c, e). Notably, there were 3591 farms offering organically grown products in 2006,6 but only 593 that were certified organic; therefore only 14.2 % of ecologically oriented farms may actually be included if we strictly pay attention to the 774 certified organic (or transitional) farms across Ontario. Our sample therefore likely captures farms not usually included in the Census of Agriculture.

Our respondent farms also have alternative forms of market engagement compared to the conventional sector.



Farm economics

As noted above, farms across Canada are under considerable economic pressure, and our survey results confirmed that this is also the case among our sample population. Farms that responded to our survey reported mean annual gross farm revenue of \$94,786 and a median of \$40,000.8 The highest grossing farm reported revenue of \$1,800,000 and the lowest grossing farm reported zero revenue, meaning they did not sell any products in the year of the survey. Perhaps more illustrative of the strained financial situation of the farms we surveyed is the personal net on-



⁴ This category includes accessing land through barter and work exchanges, kinship relationships and squatting on public land.

⁵ Transitional organic refers to those (farm operators) who were in the process of undertaking the 3-year process of having all or part of their operations certified organic at the time of the 2011 Census of Agriculture (Statistics Canada 2011c).

⁶ After the 2006 Census, Statistics Canada stopped tracking farms that reported they sold organic products but which were not necessarily certified.

As discussed in our methods section, we did specifically target CSA farms in our survey recruitment process so it is not surprising that a high percentage of farms reported marketing their food through a CSA model.

⁸ To note, the statistics presented here are based on self-reported incomes. We acknowledge that small businesses, and farms in particular, may underreport income for tax purposes. However, in the context of our survey there are no structural or financial incentives to underreport gross farm revenue or on-farm income. Nevertheless, for tax purposes, farmers likely channel gross farm revenues back into the farm rather than pay themselves.

39.5 33.0 20.0 13.5 80.3 8 Value-added products Livestock (beef, pork, (52) Ш lamb, etc.) Products (n Vegetables Poultry Fruit 39.3 10.0 9.0 86.5 8 Through a wholesale Direct to consumers Direct to a retail Marketing type establishment (68 = u)Other 59.9 21.7 14.5 8 Non-certified ecologically Certified ecologically 152) Ш Farm type (n : Conventional oriented oriented Other 15.7 2.0 49.4 18.1 8 Shared proprietorship 83) Sole proprietorship Ш Land tenure (n Rent/lease Other Free
 Fable 2
 Farm characteristics
 26.2 22.7 18.4 % Greater Golden Farm location Horseshoe South West South East (n = 141)

farm income that farmers drew from their revenues. On average respondents reported a mean personal on-farm income of \$13,629 and a median of \$7600. Responses ranged from as high as \$100,000 to as low as -\$15,015, in which case the farm is operating at a personal loss. This data confirms that a significant farm income crisis is occurring among the farms we surveyed.

Farmers in Canada are increasingly turning to off-farm income to supplement falling profits on farm and this trend held true in our sample, with farmers reporting an average of \$30.012 in off-farm income and a median of \$20,000. Nearly 48 % of Ontario farmers report income from offfarm jobs (not including spouses who may be working offfarm) (Statistics Canada 2011c). By contrast, in our sample 95 % of respondents earned off-farm income and 55 % earned more off-farm than on. One operator commented that despite using off-farm income to support the farm it was still difficult to pay employees: "Farming is not a highly paid profession and often times we are dumping money into the farm account from off-farm employment just to keep running. By the time all expenses are paid there is little to no money left to pay employees." In our pool of respondents, it is quite clear that part of the reproduction of farms is being achieved through the off-farm incomes but our data also suggests that this is being done in combination with self-exploitation and the use of non-waged workers to support farm operations.

Non-waged work and the agrarian question

Self-exploitation

In addition to mitigating the effects of the farm income crisis through relying on off-farm income, farm operators are also driven to work long hours under difficult conditions with little remuneration. Reflecting the dynamics discussed in the agrarian question literature, most of these small- and medium-size farms are only able to survive due to the self-exploitation of family members. Consider one respondent's reliance on the labor of family and friends: "I work 80-100 h per week during the growing season and the volunteers are my sister, her daughter or my two sons, and friends who are retired and looking for activity. Were it not for these people I could not have physically kept up with our 25 CSA boxes and farmers' market booth this past growing season." Another farmer stated, "At the current point in our business we wouldn't be able to afford [to pay] minimum wage as I can't even afford to pay myself minimum wage." Similarly, another farmer explained that, "Given that we each work quite a bit in excess of 2000 [hours] each per year [which would be the approximate number of hours associated with a full-time, 40 h per week



job] we as the owners are lucky to be earning minimum wage." To note, this quote is from one of Ontario's most successful CSA farms with a reported annual gross revenue of \$160,000, from which the owners drew two on-farm personal incomes of \$24,500 from their overall revenues, which is almost double the average reported by respondents.

Examining average personal net on-farm income (\$13,629 per year) shows it to be above the after tax lowincome cut-off (LICO) for rural areas for a single individual (\$12,935 in 2013) (Statistics Canada 2014). However, 61 % of farms in our sample fell below this cut-off, a number that would only increase if farmers had non-income earning members of their household. If on- and off-farm incomes are combined, the average is \$38,406 and a mean of \$27,000, with 24 % of farmers falling below the LICO. In comparison, the average net operating income for farmers across Ontario is \$39,442, which does not include additional off-farm income that averages \$42,737 per year (Statistics Canada 2011f). The total average annual income (\$82,179) is therefore significantly higher than that of our sample group, however it is important to keep in mind that an Ontario farm averages \$195,462 in total expenses (after rebates) (Statistics Canada 2011g). Therefore even larger conventional farmers that report gross farm receipts totaling several hundred thousand dollars are still faced with substantial costs and debt payments (see Statistics Canada 2011b, g).

The use of non-waged labor on small- and mediumsize farms

About 31 % of the farms in Ontario report employing paid agricultural labor, with census data indicating that this reflects the employment of nearly 85,000 farm laborers (Statistics Canada 2011c). Of these employees, about 39 % are employed year-round (either full-time or part-time) while over 60 % work on a seasonal or temporary basis (Statistics Canada 2011c). According to national statistics, 34 % of farms across Canada report employing nearly 298,000 paid farm laborers, with a slightly higher percentage of these employees working seasonally or temporarily than in Ontario (Statistics Canada 2011e). Since the Second World War, paid workers on farms have increasingly come to replace non-waged family workers. Cloutier (2001, p. 3) notes, "In 1946, unpaid family workers were the second largest group and represented 30 % of all employment in [Canadian] agriculture" whereas, by the end of the twentieth century, this group was the smallest. In the same period, paid laborers saw their share of farm employment jump from 12 to 42 % (Cloutier 2001). In Ontario specifically, paid employees now represent nearly 52 % of those working on farms, while the remaining 48 % of "self-employed" individuals includes approximately 5 % non-waged family workers and 43 % farm operators (Statistics Canada 2011h).

While non-waged work has declined throughout the broader Ontario agricultural sector, the ecologically oriented farms that responded to our survey reported that 65.6 % of their labor force was comprised of non-waged workers. Overall, our sample represents 139 farms in Ontario that employed 1091 workers (including operators). Excluding farm operators, 80.4 % of these workers received either no monetary compensation or less than minimum wage and 65.6 % were non-waged (see Table 3). Again excluding farm operators, 19.6 % of workers were paid minimum wage or more. Non-waged workers were then the most prevalent worker category identified, with each farm having an average of 4.2 non-waged workers compared to one paid less than minimum wage and 1.1 paid minimum wage or more. There was significant diversity in our sample, with one farm having 60 nonwaged workers and another employing 32 workers paid minimum wage or more. This data clearly illustrates the endurance of non-waged workers on farms. What is novel however is that workers are now predominately coming from off-farm locations rather than being family members, which has historically been the dominant trend.

Dependency on non-wage workers

Our survey asked farm operators to reflect on their labor practices and queried whether or not farmers felt they were dependent on non-waged workers. Almost 60 % of farms felt that they were dependent on non-waged workers. Additionally, 77 % of farmers said they would pay workers minimum wage or higher if they had the financial resources. Our survey suggests that there is significant pressure to use non-waged labor on these farms as the majority of small- to medium-size farmers are running un- or marginally-profitable operations. The gross farm revenue of 54 % of the farms that responded was <\$50,000. However, even the farms that have gross revenue of \$100,000 or \$150,000 are running on very thin profit margins. For instance, an operator whose farm generates \$300,000 annual gross income commented, "The farm would be bankrupt in no time at all if we were to pay everyone at least minimum wage." Nonetheless, correlations between economic variables show that farms with a greater proportion of non-waged workers tend to have lower gross revenues (r = -0.221, significant at the 0.05 level; and also Fig. 1) and lower on-farm incomes (r = -0.224, also significant at 0.05). Farms with a higher proportion of workers paid minimum wage or less also had higher gross revenues (0.411, significant at 0.01) (see Table 4).

We used independent sample *t* tests on several variables grouped by the self-reporting of farmer dependency on



Table 3 Worker employment categories of our sample farms

Worker type	Sum	Mean	Min.	Max.	SD	Percent of total workers in our sample	Percent of workers, Ontario-wide ^a
	210.0	1.6			0.0		
Farm operators	219.8	1.6	0	5	0.9	_	_
TFWP workers ^b	21	0.2	0	8	0.9	2.4	18.9
Workers paid minimum wage or more	149.5	1.1	0	32	3.1	17.2	46.9
Workers paid less than minimum wage	129	1	0	7	1.5	14.8	30.2
Non-waged workers	571.5	4.2	0	60	7.8	65.6	4.0
Percent non-waged workers per farm	-	41	0	100	34.3	_	_
Percent less-than-minimum-wage workers per farm ^c	_	15	0	78	22.2	-	-

^a Source: Employment and Social Development Canada (2014) and Statistics Canada (2011h)

^c The top five rows refer to the percentage of types of workers in our total sample and bottom two rows refer to the percent of non-waged and less-than-minimum-wage workers *per farm*

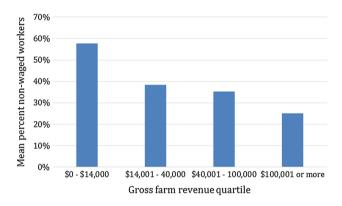


Fig. 1 Mean percent of non-waged workers by gross farm revenue quartile

non-waged workers. These tests determine if the mean values for variables are significantly different between the groups of dependent and non-dependent farms (see Table 5). The tests reveal that differences in gross revenue were not significantly different at the 0.05 level. However, off-farm income was significantly different: dependent farms had a mean of \$20,554 lower off-farm incomes than non-dependent farms. In terms of proportion, the percent of non-waged (at 0.05) and less-than-minimum-wage (at 0.01) workers are both significantly different. Dependent farms have a mean of 50 % non-waged workers versus non-dependent farms having 36.2 %. Dependent farms have 69.3 % less-than-minimum-wage workers versus non-dependent having 46.4 %. Additionally, running a t test only on farms that employ non-waged workers reveals that those who feel dependent have an average of 4.6 more nonwaged workers (or 18 %) than those who do not feel dependent (significant at 0.01, not shown in Table 5). Overall, these results show that dependency is a matter of degree, with farms that still have over a third of their workforce non-waged not feeling dependent on these interns, but farms where interns make up the majority of the workers feeling dependent on their labor.

Our data confirms that operations with higher revenues tend to use a lower proportion of non-waged labor; however, it is unclear if they are successful due to paying workers or if they pay workers because they are successful. Interestingly, though operations with higher gross revenues may have fewer non-waged workers on average, the statistical analysis suggests that many still reported being dependent on their non-waged workers. To be more precise, the t tests reveal that differences in annual gross farm revenue between dependent and non-dependent farms were not statistically significant. However, farms that said they were dependent on non-waged labor had about 8 nonwaged workers on average compared to 3.5 for those who had non-waged workers but said they were not dependent (or 66 vs 48 % non-waged workers). Farms that employed non-waged workers but do not feel dependent also had more workers paid minimum wage or more although, interestingly, differences in the amount of stipend (lessthan-minimum-wage) workers were not significant. Similar trends emerge when we consider the relationship between what might be called "worker productivity" and the number of non-waged workers on farms. Worker productivity can be roughly estimated by dividing the gross revenue of a farm by the number of workers. ⁹ The productivity of workers and the percentage of non-waged workers are significantly correlated as a value of -0.38 with a p value

⁹ To note, there are several limitations to this equation. First it does not account for the number of hours worked, nor does it account for discrepancies in the amount of time that different farmers dedicate to training and education.



^b Temporary foreign worker program

Table 4 Correlations

	Farm size (acres)	Approximate annual gross farm revenue	Personal net on- farm income	Personal net off- farm income	Percent non- waged workers	Percent less- than-minimum- wage workers	Percent workers paid a wage less than minimum	Percent workers paid minimum wage or more
Farm size (acres)	1.00	0.28**	0.16	-0.08	0.08	0.02	-0.11	0.07
Approximate annual gross farm revenue		1.00	0.56**	-0.22*	-0.22*	-0.23*	0.05	0.41**
Personal net on- farm income			1.00	-0.24*	-0.22*	-0.11	0.20*	0.18
Personal net off- farm income				1.00	0.20	0.07	-0.21*	-0.06
Percent non- waged workers					1.00	0.77**	-0.58**	-0.44**
Percent less-than- minimum-wage workers						1.00	0.08	-0.56**
Percent workers paid a wage less than minimum							1.00	-0.03
N	153	146	136	111	132	133	134	134

Significance: * at 0.05; ** at 0.01 (two-tailed test)

of 0.00. This means that farmers with a higher percentage of non-waged workers have lower productivity levels. In other words, farms that have a lower percentage of non-waged workers require fewer workers per unit of revenue.

To summarize, this analysis suggests that almost 60 % of farms surveyed are dependent on their non-waged workers, yet it is off-farm income that is most closely correlated with the reported dependency of farmers on interns, apprentices, and volunteers. Nevertheless, higher grossing farms have a lower percentage of non-waged workers and higher levels of productivity compared to lower grossing farms. The quantitative analysis offered above on the dependency of small- and medium-size farms on non-waged workers signals how many of these farms are reproducing themselves—despite being marginally profitable, if at all—through a reliance on quasi-commodified labor. 10 Given the meager on-farm incomes of many of the farms and the enduring precarity of higher grossing farms, it is the rise of a new type of non-waged worker that allows these farms to survive in the context of an increasingly industrialized agricultural sector. Thus, witnessed in the Ontario agricultural sector is a renegotiation of a classic agrarian question refracted through the rise of internships rather than family labor. The qualitative responses to our surveys, which we discuss.

The comingling of the economic and non-economic

Thus far we have painted a picture of economically marginal farms managing to persist through a mixture of offfarm income, self-exploitation, and the support of nonwaged workers. As suggested at the outset, both economic and non-economic processes are driving the growing use of non-waged workers on farms, and it is the latter that is most evident in the qualitative answers to our survey. One of the survey questions asked farmers whether they would be willing to pay workers minimum wage if they had the financial resources. One respondent's remarks highlight how factors beyond the "economic" help account for the prevalence of new forms of non-waged work on farms: "[The] question presupposes that lack of finances is the reason I'm not in the waged economy. But that's not the reason [I have interns]. Wages in the sense you mean then are just another 'cost' of doing business." We take this comment to mean that reducing non-waged work to a simple "cost" of business misrepresents what is understood by farmers to be a broader experience and set of relationships as the following two responses illustrate:

The intern system is a really good one, and I think one that has value for both the farmer and the intern. Does the accommodation, good healthy food from the



¹⁰ More research is needed to explore the degree to which the labor and educational arrangements are commodified, or not, but in this article we use the term "quasi-commodified" to capture the payment for labor through a mixture of a small stipend, room and board, and farmer training. However, we also recognize that the production produced through non-waged labour is still valorized in various markets.

Table 5 Independent samples t tests

	Levene's test for equality of variances		t test for equality of means (top test assumes equal variances; lower test does not)					
	F	Sig.	T	df	Sig.	Mean difference	SE difference	
Farm size (acres)	0.245	0.621	-0.15	118.00	0.88	-3.47	23.32	
			-0.16	111.94	0.87	-3.47	21.33	
Approximate annual gross farm revenue	4.115	0.045*	-1.53	114.00	0.13	-\$31,940	\$20,930	
			-1.35	59.34	0.18	-\$31,940	\$23,608	
Personal net on-farm income	0.074	0.785	-0.81	105.00	0.42	-\$2747	\$3388	
			-0.81	94.58	0.42	-\$2747	\$3411	
Personal net off-farm income	6.656	0.012*	-2.15	86.00	0.04*	-\$20,554	\$9581	
			-1.92	47.21	0.06	-\$20,554	\$10,704	
Farm operators	3.354	0.069	-1.70	122.00	0.09	-0.27	0.16	
			-1.77	121.10	0.08	-0.27	0.15	
Temporary foreign worker program workers	24.999	0.000**	-2.43	122.00	0.02*	-0.23	0.10	
			-2.06	51.00	0.04*	-0.23	0.11	
Workers paid minimum wage or more per hour	1.923	0.168	-2.10	122.00	0.04*	-0.58	0.27	
			-2.08	106.65	0.04*	-0.58	0.28	
Workers paid less than minimum wage	11.688	0.001**	2.27	122.00	0.03*	0.64	0.28	
			2.39	122.00	0.02*	0.64	0.27	
Non-waged workers	8.444	0.004**	2.43	122.00	0.02*	3.47	1.43	
			2.72	102.00	0.01**	3.47	1.28	
Percent non-waged workers	6.611	0.011*	2.24	119.00	0.03*	13.74	6.15	
			2.33	117.56	0.02*	13.74	5.90	
Percent less-than-minimum-wage workers	0.969	0.327	5.61	120.00	0.00**	22.93	4.09	
			5.49	97.21	0.00**	22.93	4.18	

The table compares the means for continuous variables between farms who self-reported being either dependent or not dependent on non-waged labor. A significant result for the t test indicates that the means between these two groups are <5 % likely to be random (for Sig. <0.05)

For each test variable, the first row assumes equal variance while the second row assumes unequal variance. The Levene's test for equality of variances determines which row to examine. For example, for farm size the reported *F* statistic is not significant; therefore we should look for a significant result in the second row: 0.87, not significant

Significance: * at 0.05; ** at 0.01 (two-tailed test)

soil, and the learning experience not have value too? What price can be put on fostering friendships and community? Intern and apprentice programs go far beyond what the intern provides to the farm.

Attaching a wage to a position immediately takes it from the realm of experience to the realm of a "job." I would rather have a more intimate arrangement, where workers are invited to integrate themselves into the life of the farm and, so far, internships have been the best way to foster that arrangement.

We perhaps need to question whether a wage, or indeed a fair wage, necessarily compromises the "experience" of farm work and lifestyle, the learning that takes place, and the relationships forged. These remarks clearly illustrate that non-waged work on farms is far more than an economic matter and is focused on a quasi-commodified exchange of labor for education in the name of environmental sustainability, community building, and health. In the comments above, we also see that in some cases, dollars and cents do not represent the central calculus underlying whether farmers take on non-waged workers or not.

The non-economic character of non-waged work comes into focus when we consider the educational content of such arrangements. In the North American context, the average age of farmers is rising steadily and off-farm migration trends have left many observers wondering from where the next generation of farmers will emerge. At the same time there are few formal, institutional educational programs that seek to train aspiring farmers in ecologically oriented practices.¹¹ The growth of internships, apprenticeships, and volunteer opportunities as a vehicle for

¹¹ For a list of programs see http://www.organiccouncil.ca/organics/ courses and http://www.organicagcentre.ca/Courses/course_campus_ credit.asp.



farmer training has emerged within this broader context. Many respondents when asked to list the benefits of nonwaged workers highlighted the value of education. For instance, one farmer wrote: "The exchange of information and experience for labor is an important transaction. It's one of the reasons we continue this business model. We want to teach as we work alongside the interns." More often than not, respondents linked education with the pursuit of sustainable farming practices. One farmer suggested that internships allowed them to "pass on credible information regarding the theory and practice of ecological/organic/biodynamic farming and gardening." Similarly, another farmer wrote, "I love the opportunity to teach sustainable growing practices [and] clean food ideas to the workers and thus provide an opportunity for them to change what they do and how they will live. A paid position would be less likely to be a vehicle for change." Many scholars have also called for the transfer of agroecological knowledge to take place through grassroots farmer-tofarmer exchanges (Altieri 2002; Horlings and Marsden 2011), and networks of new non-waged work arrangements have become one vehicle for achieving this. In this respect, internships, apprenticeships, and forms of volunteerism have emerged as a non-institutionalized and quasi-commodified form of farmer training, achieved not through kinship relations, but through new forms of work. The complex character of internships, apprenticeships, and forms of volunteer placements also require careful analysis of how work is valued beyond the wage. Although additional work is necessary in this area, farmers are clearly working through this question. As one wrote, "The educational value of what the volunteer laborers take away is priceless. They learn by doing and do it because it serves their purpose. I am not doing this to make money and if I pay someone for the work, that becomes their primary reason to be here and my purpose is not fulfilled."

Although non-economic motives were part of the reason why farmers worked with non-waged workers, the aggregate responses to our survey nevertheless highlighted that such motives could never be neatly separated from the "economic." One of our open-ended survey questions asked farmers to report on the top three benefits of using workers that are paid less than minimum wage. Invariably, respondents listed both economic and non-economic benefits when answering the question. For instance, 68.7 % of operators indicated that minimal labor costs (economic) and education in sustainable farming practices (non-economic) were among the top benefits of non-waged workers. One farmer wrote that interns "cost less money" but also indicated that such non-waged arrangements "create a reciprocal relationship that isn't purely commodified." Similarly, another respondent suggested that non-waged work constitutes an "efficient system of labor outside the limitations of government regulations." This farmer also noted a benefit was being "able to provide training and expertise to interested [new] farmers that is otherwise unavailable." In distinction to the large number of respondents that listed economic and non-economic benefits of non-waged workers, a mere 8.8 % of respondents listed *only* economic benefits and 13.2 % listed *only* non-economic benefits. We close this discussion by addressing the contradictions created by the entwining of economic and non-economic relationships.

The contradictions and limits of non-waged workers

As noted earlier, Galt (2013) has suggested that the moral economy of CSA farming exists uneasily alongside the strictly economic dimensions and create a series of tensions that growers must negotiate. In this final section, we suggest that similar contradictions are created on ecologically oriented farms in Ontario through the co-mingling of economic and non-economic relations. While 66.2 % of survey respondents highlighted "lower labor costs" or the ability to "get work done" as the top benefit of non-waged workers, farmers also noted that many interns, apprentices, and volunteers are not generally skilled, and can be undependable. Furthermore, farmers noted challenges of having workers live on-site along with ethical, political, and practical risks associated with relying on non-waged labor. These aspects of apprenticeships, internships, and volunteer placements sit uneasily alongside the perception that non-waged workers are both an inexpensive and a viable means of meeting on-farm labor demands.

Farmers suggested that relying on non-waged workers to accomplish essential farm tasks can be challenging because, in most cases, they lack the relevant experience and skills required. Additionally, insofar as work arrangements are not structured by wage-relationships but by a moral economy of reciprocity and an exchange of labor for education, there was confusion about the relationship between operators and workers, and what can be expected and asked of each other. Regarding the quality of workers, several respondents made blunt comments such as "you get what you pay for," with one noting that non-waged workers "are not here to work hard and lack a work ethic." Similarly, one operator wrote that they would be happy to pay minimum wage "if they were really workers, [but] most interns do not work with the same efficiency, make a lot of mistakes, and cost a lot of money. All of this we are fine with; that way they get to learn on our time and make their mistakes [and] most importantly they learn if they really want to do this with a small commitment." In the absence of a wage, expectations about the hours, intensity, and focus of work also become unclear as several respondents noted. For instance one farmer said, "some



[workers] lacking monetary compensation will not work hard" and another explained that, "trying to establish some kind of professional relationship when they aren't being paid is tricky. You feel like you can't ask much of them."

There are intriguing elements to forms of work and education based on reciprocity in a non-institutional context, but such arrangements give rise to a number of thorny questions that farmers and workers must consider and negotiate. One such question pertains to the implications of farmers' dependency on non-waged workers. Many respondents noted that the lack of wages meant that interns, apprentices, and volunteers were less dependable than waged employees. As another instance of this theme, one farmer wrote, "Sometimes people don't show up. Perhaps they are less committed than wagedworkers?" Similarly, another operator noted that the reliability of non-waged workers was a serious challenge, adding, "There is no contract signing them on for a full season, so they could leave or you could ask them to leave. There is a lot of uncertainty on both sides." Another farmer noted that one of the challenges they face is "losing their workers mid-way through the season. The stakes are high for the farmer but very low for the worker. It's easy for interns to up and go if they aren't satisfied." While non-waged workers may be a means for farms to survive in a challenging political-economic climate and a valued form of farmer training and community building, such work arrangements may also leave farmers in precarious positions. Responding to our survey question about farmers' dependency on non-waged workers, one operator who said they were not dependent offered a cautionary note: "[Being dependent] would be a recipe for disaster. All apprentices/workers have lives which take abrupt turns (pregnancy, health issues, desire to move)."

While a new cadre of farmers is being produced through internship, apprenticeship, and volunteer programs, consideration must be given to the broader implications for the workers themselves, both on and beyond the farm. It is important to flag that emergent forms of non-waged work reflect broader trends in which increasing amounts of work go unpaid, coupled with the steady casualization and deregulation of labor markets (Denning 2010; Federici 2012; Theodore and Peck 2002; Vosko 2006). The lack of wages afforded to farm interns and apprentices and the absence of regulations governing such forms of work exemplify some of the perils associated with contemporary employment trends. Several respondents suggested the lack of a formal wage represented an ethical problem but also posed a serious challenge to the sustainability and growth of ecological agriculture in Ontario. One wrote, "Everyone needs money in this world to be able to function" and another stated, "Having worked for free in the past for someone else (an experience I did not enjoy), I refuse to have anyone work for me for free." Emerging from such "realist" and politically oriented positions, many respondents commented on the importance of fairly compensating nonwaged workers as highlighted in the following remark: "I worked as an intern and believe that they more than earn a minimum wage (at least!). That is part of the reason I have changed my farm and labor structure... I could not justify hiring folks to work for free."

Stemming from concerns over "free labor," several respondents expressed their desire to move towards paid employees, suggesting that they "would be more reliable, sustainable, and ethical" and, as one farmer wrote, "People should be fairly reimbursed for their labor! It will be very challenging to build the farm sector in Canada if farms can't afford to pay reasonable wages." One of the key challenges is that, while new farmers are being trained, access to farmland remains a formidable barrier to farming (Desmarais and Wittman 2014). Several farmers flagged the lack of wages paid to interns, apprentices, and volunteers as an issue that increased this barrier. One farmer wrote that "young people need an opportunity to earn a decent wage if they want to acquire farmland and begin farming" and another explained that paying workers is "well-deserved and a much more sustainable approach to attracting good workers to a farm and giving them the resources they'll need to 1 day start their own operation." In the context of Ontario, accessing land would require an income much greater than what a minimum wage job would amount to. However, these remarks highlight both the limits and contradictions associated with non-waged work that unravel at the level of the farm and beyond.

Concluding remarks

Through this paper we have sought to provide the first substantive examination of the rise of new forms of nonwaged work on farms. We have argued that internships, apprenticeships, and volunteer opportunities on farms must be understood as one means through which operators are negotiating the agrarian question. We have suggested that emergent forms of non-wage work grow out of, and transform, a long history of unpaid family work on farms and thus this trend is no simple aberration or peculiarity. Through analyzing responses to two Ontario-wide surveys, we have argued that almost 60 % of farms reported being dependent on non-waged workers and most farms reported revenues and incomes that left them feeling economically precarious. While higher grossing farms had a lower percentage of non-waged workers compared to lower grossing operations, it was the amount of off-farm income an operator accrued that shaped their reported dependency on interns, apprentices, and volunteers.

Alongside of our analysis of the economic dimensions of the agrarian question and non-waged work on farms, we



also appreciate that the agrarian question is not a narrowly economic issue. Many ecologically oriented farms are enmeshed in a series of non-economic relationships focused on the pursuit of "sustainable" forms of production, farmer training, and the building of broader agrarian and food movements. The phenomena of internships, apprenticeships, and volunteer experiences are an important piece of the non-economic fabric of the farms we surveyed. However, we also have argued that it is impossible to tease apart the economic from the non-economic, and such neat divisions, while heuristically useful, can obscure the contradictions between these two different aspects of social and environmental life. In the context of this paper, we have argued that meeting on-farm labor needs through the use of non-waged workers is in tension with the effectiveness and reliability of some of these workers. Further, although many farms flagged internships, apprenticeships, and volunteer work as vehicles for social change and knowledge-transfer in the agriculture sector, other respondents questioned the politics, ethics, and the sustainability of new forms of non-waged work as a means of building an "alternative" agricultural sector.

At the core of the series of survey responses presented above and our commentary, is a series of ethical, political, and practical questions that stem from the uneasy, or at least contradictory, economic and non-economic character of non-waged farm work. Much more in-depth qualitative research is needed to explore the contradictions and challenges noted above, but the central questions that need to be answered are: How just and how sustainable are emergent forms of non-waged work? Can and should this sector grow on the backs of non-waged workers and, if so, to what effect? These questions should not be narrowly read as pertinent to only Ontario as these new on-farm work arrangements are growing across the global north. To conclude, additional research is needed to provide a more socially and spatially textured account of emergent forms of non-waged work, and this includes accounting for the subjective and lived dimensions of such work as well as the political possibilities and limits immanent to new forms of labor, education, and social movement building.

Acknowledgments This research was supported by a grant from the Social Sciences and Humanities Research Council of Canada. In addition, we gratefully acknowledge support from the organizations that supported the distribution of our survey and the farmers and farm operators that completed the survey. Heidi Tripp's work as research assistant was also invaluable in preparing this article.

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Michael Ekers, Ph.D. is an Assistant Professor in the Department of Human at the University of Toronto, Scarborough. His research mobilizes social and political theory and political economic approaches to understand the making of different environmental landscapes. He is a co-editor of *Gramsci: space, nature politics*.

Charles Z. Levkoe, Ph.D. is a Postdoctoral Fellow in the Department of Geography and the Environment at Wilfrid Laurier University. His research focuses on civil society organizations and the growth of regional food networks in Canada. He has been active in investigations at the intersections of food sovereignty movements and community-campus engagement.

Samuel Walker is a Ph.D. candidate in the Department of Geography and Planning at the University of Toronto. His research interests include political ecology, critical GIS, and the growing urban agriculture movement in North America.

Bryan Dale is a Ph.D. candidate in the Department of Geography and Planning at the University of Toronto. His research interests include political economy and ecology, climate justice, and the global food sovereignty movement.

