Do Municipal Sustainability Plans Reflect Multispecies Justice?

The Case of Toronto

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Sustainability plans in cities have become commonplace, but governance processes often perpetuate inequities for marginalized groups. This paper investigates how equity and nature are framed in two sets of municipal sustainability plans from the City of Toronto through a novel multispecies justice framework. It is found that there is a clear focus on equity in both plans, but policies fall short in practically addressing how certain actions will ensure justice outcomes, and contain conflicting discourse around how, and for whom, nature should be valued. More can be done to ensure policymaking is meaningful for marginalized groups in urban governance planning.

Keywords: Sustainability; multispecies justice; marginalized; urban governance; cities

1. INTRODUCTION

The idea of the sustainable city is continuously gaining momentum, such as with the United Nations establishing Sustainable Development Goal 11 which seeks to make cities inclusive and resilient (United Nations, 2015). In 2020, almost eighty-four percent of the North American population lived in cities (Buchholz, 2020), and the percentage of the global population living in cities is expected to grow to sixty-eight percent by 2050 (United Nations, 2018). At the same time, climate change impacts disproportionately affect marginalized humans due to historic and systemic inequities that put them at higher risk from issues such as increased exposure to heat, flooding, and natural disasters (Islam & Winkel, 2017). Further, nonhuman animals, termed "animals" moving forward, are increasingly vulnerable to the impacts of climate change due to their sensitivity to the exposure of external factors, including temperature changes, surface water alterations, and habitat loss (Steele et al., 2015). In this context it is crucial to understand how urban sustainability governance can work towards more equitable cities.

Urban sustainability initiatives often tout both the social and environmental benefits of their implementation, however Dagmar Haase et al. (2017) note that while the literature and policies on sustainability solutions promote inclusiveness and social cohesion, little is known about how these strategies actually affect the health, livelihoods, and living conditions of marginalized communities. In fact, it is likely that the implementation of sustainability solutions in cities can exacerbate inequities, such as displacing low-income communities due to rising property prices in the developed area, and often only accounting for curated versions of wild habitats (Black & Richards, 2020), which fail to make meaningful space for both vulnerable humans and animals who are disproportionately impacted by climate change. Thus, there is a gap in our understanding of how urban sustainability plans and projects can aid vulnerable humans and animals in accessing the benefits of these actions. This paper proposes a multispecies justice framework for urban governance grounded in the three pillars of environmental justice which can be used to create and evaluate urban sustainability plans. I use this framework to investigate whether equity and nature are incorporated in sustainability plans of Toronto, Canada, and determine whether these plans can help marginalized humans and animals realize the benefits of sustainability actions.

1.1. Urban Governance and Environmental Justice

Sustainability actions are planned and implemented through urban governance, which relates to "intentional actions or interventions to address a specific problem," in this case realizing resilient and sustainable cities (Cas-

tan Broto, 2017, p. 2). Urban governance holds an inherent recognition of the vital role that non-state actors, such as local communities, civil society organizations, and businesses, play alongside state actors in realizing a certain goal, and shaping the trajectory towards that goal (Castan Broto, 2017). Given the multitude of actors involved in urban governance, it is perceived to bring together social justice concerns alongside sustainability planning by managing trade-offs and conflicts through planning processes grounded in justice (Bush & Doyon, 2019), often through the three pillars of justice: procedural, distributional, and recognitional.

Procedural environmental justice can be defined as the inclusion or exclusion in participation and decision-making processes and outcomes of marginalized groups (Anguelovski et al., 2020). Equitable and just participation must include meaningful engagement from vulnerable groups that represents the diversity of voices and needs present in a given community for effective governance (Castan Broto, 2017). However, urban governance can perpetuate "processes that support or obstruct different individuals, groups, or organizations" in exercising control over decision-making processes and outcomes (Bahadur & Tanner, 2014, p. 201). Anguelovski et al. (2020) find that many instances of civic participation do not allow participation by individuals having experienced past violence, insecurity, or crime, leaving marginalized communities unable to voice their interests.

Distributional environmental justice can be defined as whether interventions address historic social, racial, and cultural inequities (Anguelovski et al., 2020). Distributional justice involves the equitable distribution of environmental benefits and burdens to redress inequities. For example, in analyzing the incorporation of green spaces in US and Chinese cities, most studies reveal that the distribution of green space disproportionately benefits white and wealthy communities (Wolch et al., 2014).

Lastly, recognitional environmental justice is defined as decision-makers and other individuals in positions of power paying attention to the values, needs, and preferences of marginalized groups to redress structural inequities that create and reinforce marginalization in sustainability initiatives. By recognizing the vulnerabilities and challenges that marginalized groups face from climate change impacts, urban sustainability actions can be implemented in ways that allow for equitable access to these benefits. However, attempts to include recognitional statements of the challenges faced by marginalized groups can be tokenistic if there is no meaningful attempt to include the needs of these groups into procedural or distributional outcomes (Parsons et al., 2021.)

Along with these noted shortcomings in how procedural and distributional environmental justice are practiced, the implementation of sustainability actions through urban governance is further complicated by the fact that such approaches are more often than not anthropocentrically-framed, with actions based on how nature can best serve human economic, health and wellbeing interests, excluding the interests of animals in the planning process (Hirtenfelder, 2024; Houston et al., 2018; Shingne, 2020; Wallach et al., 2018). It is argued that "urban planning has a history of viewing cities as somehow separate from nature… failing to see how humans and nonhuman animals co-construct and cohabit urban life worlds" (Houston et al., 2018, p. 192). However, with rapid urbanization and climate change leading to animals finding their way into urban spaces, cities must promote co-existence with animals (Hunold & Mazuchowski, 2020; Steele et al., 2015; Wallach et al., 2018), as "the loss of home and habitat applies as much to human citizens as to species and neglected animals" (Steele, 2021, p. 129).

1.2. A Multispecies Justice Framework for Urban Governance

The dominant anthropocentric sustainability approaches used in urban governance crowd out alternative ways of knowing that see animals as sentient beings with inherent value (Ganowicz-Baczyk, 2016; Kopnina & Cherniak, 2015; Kopnina et al., 2022; Shastri, 2013). Beings with inherent value are subjects-of-a-life who "want and prefer things, believe and feel things, recall and expect things" which all make a difference to the quality of one's life as lived and experienced (Regan, 1985, as cited in Gruen, 2017). However, the ability of subjects-of-a-life to pursue such interests becomes complicated in the face of sustainability challenges. Take, for example, the Grey Headed Flying Foxes whose native habitats were impacted by drought but were culled after seeking shelter at the Botanic Gardens in Melbourne, Australia (Franklin, 2017; Smith & McManus, 2024), or the poisoning of coyotes in North American urban areas due to their migration into "humanized landscapes" seeking shelter and food (Hunold & Mazuchowski, 2020; Wallach et al., 2018, p. 1260). Humans thus have a duty to uphold certain rights that animals hold, such as the right to be treated with respect and compassion (Kopnina et al., 2022; Regan, 2016, as cited in Batavia & Nelson, 2017), as well as a "duty of assistance when in-

dividuals are facing harm" (Santiago-Avila & Lynn, 2020, p. 5), such as is the case with climate change. This entails the inclusion of vulnerable animals in the planning and implementation of urban sustainability actions to support animals in navigating transitions from climate change (Houston et al., 2018, p. 201; Nista et al., 2020).

With rapid urbanization and the need to promote co-existence between humans and animals, urban policymakers should engage in multispecies justice when planning for sustainability. Multispecies justice rejects the idea of human exceptionalism, meaning that humans are considered separate and above other entities, including animals, when considering for whom sustainability initiatives aim to benefit (Houston et al., 2018; Kopnina et al., 2022), and rather aims to foster an "intersectional approach to justice that recognizes the simultaneity of identities and categories of difference and inequalities and their interlocking structures and processes of injustice and oppression" (Pellow, 2018, as cited in Tschakert et al., 2021, p. 5). Multispecies justice is valuable for urban sustainability planning because it can help overcome the conception that cities are separate from nature, or that cities only "belong" to humans (Houston et al., 2018; Hunold & Mazuchowski, 2020). Expanding on the three pillars of justice in urban sustainability planning can open up dialogues to recognize and address the intersectional nature of oppressive structures that leave vulnerable animals without adequate assistance to thrive in the face of climate change, and instead move towards creating plans that address the reality of humans and animals living together in shared urban spaces with an equal "right to the city" (Houston et al., 2018; Hubbard & Brooks, 2021; Shingne, 2020; Smith & McManus, 2024). Several authors have done work that aims to create sustainable pathways for both humans and animals in urban areas grounded in a multispecies justice theory (Cannon et al., 2023; Fieuw et al., 2022; Kellogg, 2023; Mancini et al., 2023; Martin et al., 2013; Pineda-Pinto et al., 2023; Steele et al., 2015; Steele, 2021). Notably, Martin et al. (2013) state that a "diversity-friendly justice can also be a biodiversity-friendly justice" (p. 128), and that separating social justice concerns from biodiversity concerns just perpetuates human-nature dualisms (p. 123). Further, Steele et al. (2015) call for a new urban climate justice that moves away from a dualistic approach by integrating eco-social justice principles with equity for animals in cities. While these examples provide a good starting point in thinking about how to foster co-existence between humans and animals in urban spaces, it is not yet clear how urban sustainability initiatives can build on these efforts to ensure that the interests of both vulnerable humans and animals are met in planning and implementation to promote co-existence. However, to put it plainly, "wild animals also live in cities" (Granai et al., 2024, p. 2) and must be considered when planning for urban sustainability action.

Thus, a multispecies justice framework is used in this paper to investigate whether municipal sustainability plans reflect multispecies justice. By engaging with multispecies justice in urban governance, "engagement, questions, and decisions about which species, which beings, which relationships, and which interconnections are valued and which are not, and who makes such decisions" (Celermajer, 2021, p. 132) become important questions for revealing power relations and dynamics that make urban governance processes and outcomes inequitable and unjust (Houston et al., 2018). Specifically, multispecies justice "highlights the importance of confronting our own and others prejudices, and instead engaging in an ethically and scientifically informed exploration of how we 'do right'" (Santiago-Avila & Lynn, 2020, p. 5). In this way, urban governance can be made more meaningful in order to surface injustices and navigate conflicts and trade-offs through the inclusion of diverse stakeholders to realize change so that vulnerable humans and animals can access the benefits of urban sustainability initiatives.

I constructed a novel analytical framework focusing the three pillars of environmental justice through a multispecies justice lens to create an assessment tool that can be used to create and evaluate urban sustainability plans, and provides a tool for thinking about how to improve upon conservative or traditional urban sustainability planning. Through a literature review, multispecies procedural, distributional, and recognitional justice categories were identified. This novel multispecies justice framework is included in Table 1.

Table 1. A Novel Multispecies Justice Framework

Pillar of Multispecies Justice	Summary	Sub-Category of Pillar
Procedural	Procedural multispecies justice refers to the inclusion of diverse and marginalized humans and nonhuman animals in participation and decision-making processes in meaningful ways (Anguelovski et al., 2020). Participatory processes should be democratic, which means that voiceless humans and nonhuman animals are given a political, autonomous voice in planing for actions that affect them (Pineda-Pinto et al., 2022; Rupprecht et al., 2020; Tschakert, 2022). A diverse range of communication and engagement practices should be used to enable alternative ways of knowing, which includes Indigenous approaches and participation (Celermajer, 2021; van Dooren & Rose, 2016). Negotiation and reciprocal learning is used to determine values and to operationalize multispecies justice (Coulthard, 2014; Pineda-Pinto et al., 2022; Yaka, 2019).	1. Inclusive and democratic participation and decision-making 2. Liberating and emancipatory practices 3. Exchange of knowledge to facilitate and legitimate alternative ways of knowing
Distributional	Distributional multispecies justice refers to the equitable distribution and access of environmental, health, and socio-political benefits and resources for both marginalized humans and nonhuman animals (Pineda-Pinto et al., 2022). Distributional justice involves the actual allotment of goods and resources, such as infrastructural planning that provides accessibility and new habitats to marginalized humans and nonhumans animals, as well as actions promoting connectivity and stewardships for marginalized groups (Parris et al., 2018; Pineda-Pinto et al., 2022). Biodiversity-sensitive practices are used in both existing urban green spaces and in the provision of new spaces to provide refuge for nonhuman animals and to encourage biodiversity gain (Parris et al., 2018). The implementation of "universal design" for both humans and nonhuman animals in urban infrastructure can provide resources to support flourishing in common ways (Coulthard, 2014; Cousins, 2021; Parris et al., 2018).	1. Equitable access to resources to support flourishing 2. Use of biodiversity-sensitive practices 3. Implementation of equitable "universal design" for humans and nonhuman animals
Recognitional	Recognitional multispecies justice refers to decision-makers and other individuals in positions of power paying attention to the values, needs, and interests of marginalized humans and nonhuman animals (Anguelovski et al., 2020). Operationalizing justice refers to recognizing historical disenfranchisement through human exceptionalism, which is when humans are considered separate and above other beings, and are counted as the most important in distributing goods and resources (Celermajer, 2021; Houston et al., 2018; Tschakert, 2022). Disenfranchisement stems from the marginalization of human groups by race, class, and gender, and also extends to the oppression of nonhuman animals through similar socio-political institutions and ontologies (Celermajer, 2021; Cousins, 2021; Pellow, 2017; Tschakert, 2022; Yaka, 2019). Recognitional multispecies justice considers the agency and interests of disenfranchised humans and nonhuman animals in order to foster multispecies entanglements and shared experiences (Houston et al., 2018; Rupprecht et al., 2020; Steele et al., 2019; Tschakert, 2022).	1. Addressing issue of human exceptionalism 2. Consideration of agency of interests of disenfranchised humans and nonhuman animals 3. Discussion of historical legacies of injustice

Note. The novel multispecies justice framework used to analyze municipal sustainability plans using the three pillars of justice framework through a multispecies justice lens.

Procedural multispecies justice is identified as the inclusion of diverse and marginalized humans and animals in participation and decision-making processes in multiple ways (Anguelovski et al., 2020). Participatory processes are democratic, with the voiceless given a political, autonomous voice in planning for actions that affect them (Meijjer, 2013; Pineda-Pinto et al., 2020; Rupprecht et al., 2020; Tschakert, 2022). A diverse range of communication and engagement practices are used to enable alternative ways of knowing, and negotiation and reciprocal learning are used to determine needs and values to operationalize multispecies justice (Celermajer, 2021; Coulthard, 2014; Pineda-Pinto et al., 2022; van Dooren & Rose, 2016; Yaka, 2019). Thus, based on this literature, I have identified three sub-categories of multispecies justice: inclusive and democratic participation and decision-making; liberating and emancipatory practices; and, the exchange of knowledge to facilitate and legitimate alternative ways of knowing. A concrete example of how procedural multispecies justice can be operationalized in sustainability planning is using "trustee representation" where human speakers give voice to the voiceless and participate on behalf of those who cannot speak for themselves in "democratic deliberation" (Santiago-Avila & Lynn, 2020, p. 5). This example can be applied to both humans and animals by intermediary community-based organizations representing vulnerable groups who may feel excluded at the decision-making table, and by representatives from animal rights or wildlife organizations who can advocate for the wellbeing of animals in sustainability planning. Engaging with a diversity of voices in this way can lead to an exchange of knowledge, and facilitate and legitimate alternative ways of knowing to mainstream alternative discourses in urban governance. For example, Project Coyote, a nonprofit organization based in Northern California, works to promote co-existence between coyotes and humans in urban spaces by engaging residents in educational campaigns about navigating conflicts, and represents the interests of coyotes in "developing coyote coexistence plans for municipalities" ("Victories," 2022).

Next, distributional multispecies justice refers to the equitable distribution and access of environment, health, and socio-political benefits and resources for both marginalized humans and animals (Pineda-Pinto et al., 2022). Distributional multispecies justice involves the actual allotment of goods and resources, such as infrastructural planning that provides accessibility, connectivity, and new habitats to marginalized humans and animals (Parris et al., 2018; Pineda-Pinto et al., 2022). Biodiversity-sensitive practices are used in both existing urban green spaces and in the provision of new spaces to provide refuge for animals and to encourage biodiversity gain (Parris et al., 2018). The implementation of "universal design" for both humans and animals in urban infrastructure can provide resources to support flourishing in common ways (Coulthard, 2014; Cousins, 2021; Parris et al., 2018). Based on the literature, the three subcategories of multispecies distributional justice I have identified are thus: equitable access to resources to support flourishing; use of biodiversity-sensitive practices; and, implementation of equitable "universal design" for humans and animals. A concrete example of how distributional multispecies justice can be operationalized in sustainability planning is by considering how animals share urban spaces with humans. For example, the city of Chicago's Wildlife Management & Coexistence Plan (2021) seeks to improve habitat connectivity throughout the city, and provides non-lethal management approaches for backyard species to encourage the flourishing of animals and prevent human-wildlife conflicts ("City of Chicago Wildlife Management & Coexistence Plan," 2021; Hunold & Mazuchowski, 2020). Further, the 11th Street Bridge Park project in Washington, D.C. included the provision of both "biodiversity features and recreational opportunities as well as adjacent river clean-up and restoration," and the project was "coupled with an Equitable Development plan that funds new minority-owned businesses and social venues, supports affordable housing measures to help avoid displacement, and creates resident-driven greening" (Anguelovski et al., 2022, as cited in Anguelovski & Corbera, 2023, p. 50). Lastly, biodiversity-sensitive practices can be integrated into everyday urban management, such as "collecting and redirecting urban runoff from small, impervious catchments" to provide "refugia for biota vulnerable to drought or heat" (Welbergen et al., 2008, as cited in Parris et al., 2018, p. 49), among other uses, and "retaining, instead of removing, understorey vegetation, fallen branches and leaves" to promote "nutrient cycling… and important habitat for a variety of flora and fauna" (Imberger et al., 2011, and Threlfall et al., 2016, as cited by Parris et al., 2018, p. 50).

Lastly, recognitional multispecies justice refers to decision-makers and other individuals in positions of power paying attention to the values, needs, and interests of marginalized humans and animals (Anguelovski et al., 2020). Operationalizing justice refers to recognizing historical disenfranchisement through human exceptionalism, which is when humans are considered sepa-

rate and above other beings, and are counted as the most important in distributing goods and resources (Celermajer, 2021; Houston et al., 2018; Tschakert, 2022). Disenfranchisement stems from the marginalization of human groups by race, class, and gender. Similar socio-political institutions and ontologies affect animals (Celermajer, 2021; Cousins, 2021; Pellow, 2017; Tschakert, 2022; Yaka, 2019). Recognitional multispecies justice considers the agency and interests of disenfranchised humans and animals in order to foster multispecies entanglements and shared experiences (Houston et al., 2018; Rupprecht et al., 2020; Steele et al., 2019; Tschakert, 2022). Thus the three sub-categories of multispecies recognitional justice I have identified from the literature are: addressing the issue of human exceptionalism; consideration of agency and interests of disenfranchised humans and animals; and, the discussion of historical legacies of injustice. Operationalizing recognitional multispecies justice in sustainability planning starts with acknowledging the rights of both humans and animals to equitably occupy shared spaces. Only then can procedural and distributional multispecies justice be meaningfully operationalized since the structures that prevent vulnerable groups from accessing participatory and distributional benefits must first be transformed (Celermajer et al., 2021). This is crucial to prevent tokenistic gestures, such as engaging in "nuanced listening" to nonhuman animals, or "becoming more attentive to the languages of diverse socio-natural collectives," which can be empty gestures if lessons learned are not translated into urban sustainability plans (Fitz-Henry, 2022, pp. 344-345). Instead, we must engage with "the far more difficult labor [of] thinking about political processes, principles, and pathways" that meaningfully seek to acknowledge the suffering of vulnerable humans and nonhuman animals (Fitz-Henry, 2022, pp. 344-345).

This framework was developed based on multispecies justice literature and its intersection with urban governance literature. The framework used in this paper is not intended to encompass all environmental justice approaches, but instead draws on a set that are particularly useful in the context of urban governance. Further, multispecies justice here is being incorporated in urban governance and planning through a biocentric lens to focus on the interests of humans and animals narrowly, apart from an ecocentric lens which would also consider abiotic elements such as plants and water features. I argue to support sentient animals in pursuing their interests as subjects-of-a-life, the abiotic elements that support their livelihoods must automatically be considered in sustainability initiatives. If an ecocentric approach is taken, sentient animals who face climate impacts can be threatened to support the integrity of the larger ecosystem and ecosystem services to maintain continued value for humans, perpetuating anthropocentric framings of nature and animals (Latombe et al., 2022). Ecocentrism can also lead to a nativist approach in urban sustainability planning that traditionally values only those species that are deemed to belong to a certain space and "threaten deep-seated ideologies about how nature should be" (Chew & Hamilton, 2011, as cited in Wallach et al., 2018, p. 1263), further threatening the welfare of sentient animals navigating human-induced land-use changes and climate impacts (Wallach et al., 2018), and reveals the intersectional inequities that exclude both vulnerable humans and animals in accessing the benefits of urban sustainability actions. This is one way to approach multispecies justice in urban governance to ensure that the rights of vulnerable groups are not compromised to satisfy the interests of more powerful decision-makers.

It is useful to note here that a common objection to utilizing multispecies justice is whether trade-offs can be equitably managed when conflicts arise between the rights of humans and animals, which several authors have engaged with understanding (Felappi et al., 2020; Garfinkel et al., 2023; Heise, 2024; Liberati et al., 2019; Roman et al., 2021) While multispecies justice seems on the surface to favor the rights of animals, this is simply not the case. Rather, in the face of conflict, those who favor the rights of humans can be argued to be subscribing to human exceptionalism, instead of embracing the scope to which multispecies justice can aid in navigating conflict and trade-offs between humans and animals. Indeed, Park and Valentino (2019) found that human rights and animal rights are mutually reinforcing, and that "support for animal rights is associated with higher levels of support for the human rights of disadvantaged groups at individual and state policy levels" (Park & Valentino 2019, as cited in Wallach et al. 2020, p. 1103). Further, embracing compassion and justice in cases of conflict can allow for meaningful change to inequitable and unjust decision-making processes and outcomes; indeed, "what is being proposed does not promise peaceful resolution, but suggests more hesitating, provisional, situation-specific agreements (van Dooren, 2019, as cited in Celermajer et al., 2021, p. 22). Thus, by utilizing multispecies justice principles in navigating conflicts, the most mutually beneficial outcomes towards vulnerable humans and animals can be arrived upon. Conflicts are

bound to arise in urban governance planning processes given the multitude of actors and interests involved, but we need to recognize that "humans are uniquely implicated in conceiving and practicing multispecies justice" and are solely responsible for exploiting its capacity to "ethically navigate the real world we face" (Celermajer et al., 2021). Below, I operationalize the novel multispecies justice framework to better understand whether and how municipal sustainability plans reflect multispecies justice.

2. CASE STUDY AND RESEARCH METHODS

The novel multispecies justice framework was used to evaluate the discursive construction of frames for equity and nature in two Toronto sustainability plans: TransformTO and the Biodiversity Strategy. This section provides an overview of Toronto as a case study, as well as methods used in this research.

2.1. A Case Study on Toronto, Canada

The City of Toronto is the capital city of Ontario, Canada, and has, as of 2022, a land area of 630 km^2 with a population of 3,025,647 people. According to the 2016 Census, 20.2% of Toronto's population is low-income, and 132,765 people cannot speak English or French ("Toronto at a Glance," n.d.). Toronto's population is also projected to be 4.20 million by 2046 ("Ontario population projections," 2023), adding over one million people to an area of only 630 km^2, resulting in further encroachment of built spaces into natural areas surrounding the city.

The word Toronto comes from the Mohawk tkaronto, meaning "trees standing in water" (Villager, 2023). Indeed, Toronto is known as a "city within a park" because of the natural greenspaces within and surrounding the city. Toronto is on "the traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee, and the Wendat peoples and is now home to many diverse First Nations, Inuit, and Metis peoples" ("TransformTO Net Zero Strategy," 2021).

Toronto is situated within a tiered government system, where the city's municipal government is responsible for, among other things, parks, land use development, and transportation (Cappell et al., 2022). Policies and funding supporting local actions, however, often stem from provincial and federal legislation, such as clean energy production or determining building codes (Cappell et al., 2022). Toronto City Council declared a climate emergency in 2019 in response to increasing impacts from climate change such as flooding from extreme weather events, and power outages from extreme heat ("About the Climate Crisis," n.d.; TEA Staff, 2021b). Apart from TransformTO and the Biodiversity Strategy, Toronto's sustainability plans are diverse and include the Toronto Resilience Strategy, the Long Term Waste Management Strategy, and the Poverty Reduction Strategy (TEA Staff, 2021a).

There is a consensus that "Toronto is not on track to meet its 2030 target of a 65% emissions reduction from 1990 levels," and is unlikely to meet the 2040 targets without transformative action (Slater et al., 2022). Despite a wide-ranging library of sustainability strategies, climate impacts in the city, such as poor air quality and a lack of greenspace, are worsening for vulnerable populations (Bowden, 2023). This makes Toronto a good candidate for assessing its sustainability strategies through a multispecies justice lens.

2.2. Research Materials and Methods

TransformTO is billed as Toronto's ambitious climate action strategy ("TransformTO," 2021). It was approved by City Council in July of 2017, and the updated Net Zero Strategy was adopted by City Council in December of 2021 ("TransformTO," 2021). TransformTO is based on low-carbon goals and strategies to improve health and social equity, while simultaneously bolstering the economy ("TransformTO," 2021). Three TransformTO documents were analyzed:

1. TransformTO Net Zero Strategy
2. TransformTO Indigenous Climate Action Summary Report
3. TransformTO Public Consultation Report

The Biodiversity Strategy is an overarching policy that aims to support healthier and richer biodiversity in the city, while increasing awareness of what nature looks like in Toronto, and how residents can support this nature ("Biodiversity in the City," 2021). The Biodiversity Strategy was passed by City Council in October of 2019, and progress has been made on several actions, such as thirteen restoration projects and the publishing of biodiversity booklets ("Biodiversity in the City," 2021). Two Biodiversity Strategy documents were analyzed:

1. Toronto Biodiversity Strategy
2. Biodiversity Strategy Summary of Public Consultation

These strategies were chosen as climate change and biodiversity loss are two key sustainability concerns, and are important issues to address when taking action on making cities more sustainable. In addressing these is-

sues, TransformTO and the Biodiversity Strategy thus represent the recognition of these key sustainability concerns by the City of Toronto, and were discursively analyzed to investigate the ways in which equity and nature are framed in municipal climate and biodiversity plans.

This research followed methods taken by Finn and McCormick (2011) and Tozer and Klenk (2018) to identify storylines around nature, equity, and justice that dominate policy documents through "extensive absorption of the texts" based in a Foucauldian approach (Tozer & Klenk, 2018, p. 176). A Foucauldian-based discourse analysis holds an assumption that the knowledge incorporated into the strategies are not objective, but rather an outcome of unequal power relations that order reality in a certain way (Cheek, 2008; Day & Patel, 2021; Hirtenfelder, 2024; Waitt, 2010). The concept of frames is useful here to assess how justice and nature are considered in urban sustainability initiatives. In general, a frame refers to "a way of mentally or discursively defining a topic" (Williams & Sovacool, 2019), and are vehicles through which social constructions become reality by way of the influence of powerful actors and decision-makers (Nyberg et al., 2017; Williams & Sovacool, 2019; Woroniecki et al., 2020). It is exactly through the construction of, and action upon, frames that certain stakeholders are included or excluded, and certain goals are prioritized, in urban governance processes (Woroniecki et al., 2020). A discourse analysis is appropriate for analyzing these sustainability strategies as discourse analysis offers "insights into how particular knowledge becomes common sense and dominant, while simultaneously silencing different interpretations of the world" (Waitt, 2010). This research thus contributes to an emerging area of discussion on the intersections of Foucauldian-based discourse analysis and animals (Chrulew, 2017), in an application focused on urban sustainability planning.

Coding was carried out through NVivo, and was organized according to the identified multispecies justice categories (see Table 1). Coding was carried out inductively in order for the "analysis to speak for itself," rather than solely imposing prior research or assumptions onto the texts (Williams & Sovacool, 2019, p. 6). Coding results were compiled and major themes were identified, as discussed below.

3. RESULTS

This section examines key findings from analyzing the sustainability plans using the multispecies justice framework. I identify four key results: 1) TransformTO is framed around achieving equity for vulnerable human populations, but with little addressing equity for animals, 2) the Biodiversity Strategy excels in all subcategories of multispecies justice, but with a stronger focus on wildlife as a whole, 3) discourse on nature and biodiversity in TransformTO prioritizes an ecosystem services approach, and 4) discourse on nature and wildlife in the Biodiversity Strategy is conflictingly framed as having value for both ecosystem services and intrinsic value.

3.1. Equity in TransformTO

There is a clear focus on equity in the TransformTO documents framed around how the City can realize benefits for equity-deserving communities. The City identifies vulnerable populations as "those with low incomes, Indigenous Peoples, 2SLGBTQ communities, undocumented individuals, immigrants and refugees, women, seniors, children, people with disabilities, and racialized people" ("TransformTO Net Zero Strategy," 2021, p. 38). Equity is such a central focus in TransformTO that it is also the first "Key to Success": "Action must begin now and must focus on equity" ("TransformTO Net Zero Strategy," 2021, p. 98).

One way of achieving this focus on equity was through an effort to prioritize public engagement and participation in developing the TransformTO Net Zero Strategy. For example, there were extensive engagement approaches that took into account the limitations for in-person public consultation during the COVID-19 pandemic in 2019 and 2020. Some activities included community discussions supplemented by an online explainer video and other materials available in multiple languages to ensure inclusivity in participation, and an online survey and Idea Board ("TransformTO Public Consultation Report," 2021, pp. 5, 13-15).

Comments collected from public consultation were also taken into account in the development of the TransformTO Net Zero Strategy's actions for implementation. For example, one of the main priorities from these consultation activities included residents highlighting the need to "focus outreach on equity-seeking groups to lead and implement local climate action" ("TransformTO Public Consultation Report," 2021, p. 10), and a need to "focus on youth engagement and leadership" ("TransformTO Public Consultation Report," 2021, p. 10). These priorities translate into actions for implementation that have been included in the Net Zero Strategy, such as Action 18: Support resident-led climate action and engagement, which will include funded local projects through Climate Action Grants and the

Neighborhood Climate Action Champions Program ("TransformTO Net Zero Strategy," 2021, pp. 80-81).

The City also specifically focuses on equity for Indigenous Peoples in both the development and implementation of the Net Zero Strategy, such as Indigenous communities being engaged in an Indigenous Knowledge Workshop in October of 2018 ("Indigenous Climate Action Summary Report," 2018, p. 1). Yet, there was a consensus that engagement was not meaningful and needed to be more collaborative ("Indigenous Climate Action Summary Report," 2018, p. 3). The City corroborates this concern by including actions in the Net Zero Strategy based in reconciliation, such as developing Indigenous Advisory Circles to ensure implementation is equitable and respectful ("TransformTO Net Zero Strategy," 2021, pp. 84-85, 123).

Both the public engagement activities and these resident-led climate actions fall under the procedural multispecies justice subcategories of inclusive and democratic participation and decision-making, and the exchange of knowledge to facilitate and legitimate alternative ways of knowing, with the actions for implementation further categorized in the distributional multispecies justice subcategory of equitable access to resources to support flourishing, as resources will be given to local resident groups to increase grassroots capacity for climate action ("TransformTO Net Zero Strategy," 2021, p. 81).

Participatory and distributional pathways to achieve equity are continuously grounded in the Net Zero Strategy through recognitional statements highlighting the need to consider how climate actions will impact low-income and other vulnerable residents who struggle with affordability across implementing home retrofits, increases in rent, and access to transportation ("TransformTO Public Consultation Report," 2021). For example, the City states that:

> Lower-income Torontonians tend to live in poorer-quality housing which reduces quality of life, costs more to heat, and has reduced access to cooling such as air conditioning, recreational facilities, and shady greenspace. These neighborhoods are more likely to have lower level of transit accessibility and active transportation infrastructure… As noted in the Toronto Poverty Reduction Strategy, poverty in Toronto is gendered, racialized, and geographically concentrated. ("TransformTO Net Zero Strategy," 2021, p. 38)

Recognitional multispecies justice is also seen in public consultation. For example, participants noted that increasing tree canopy cover, biodiversity and greenspaces was a priority not just for human wellbeing, but also because "the wildlife in Toronto has not been able to flourish with the existing amount of greenspace" ("TransformTO Public Consultation Report," 2021, p. 32), placing animals within the realm of equity-deserving communities. These statements fit well under all three subcategories of recognitional multispecies justice, but only translates to one action for implementation in the Net Zero Strategy, Action 17: Increase canopy cover and biodiversity and enhance greenspaces ("TransformTO Net Zero Strategy," 2021, p. 78), which does not mention specifics on how this will realize equity benefits for urban animals.

3.2. Equity in the Biodiversity Strategy

The Biodiversity Strategy exemplifies all three pillars of multispecies justice, but there is a greater focus on equity for nature and wildlife in the City than for humans. To start, the Biodiversity Strategy began with a three-stage consultation process that included an Urban Biodiversity Workshop, three Advisory Group meetings, and four public consultation events ("Biodiversity Strategy Consultation Report," 2019, p. 3). Participants of these consultation events included organizations such as Canadians for Furbearing Animals, Protect Nature TO, and Fatal Light Awareness Program (FLAP) ("Biodiversity Strategy Consultation Report," 2019, pp. 6-8). The consultation events and the inclusion of these groups exemplify all three subcategories of procedural multispecies justice, which can also stem from a place of recognitional multispecies justice in that the inclusion of these groups considers the agency and interests of disenfranchised humans and animals.

The Biodiversity Strategy does well in also realizing equity through distributional multispecies justice, with discourse and actions for implementation seeing equity benefits for both humans and animals. For example, the Strategy champions the use of community stewardship and education to support biodiversity around the City, such as through volunteer initiatives in High Park and the Humber Bay Butterfly Habitat where residents "assist with stewardship, restoration and monitoring activities" ("Biodiversity Strategy," 2019, pp. 39, 42), and the Natural Environment Interpretive Projects, such as the East Point Bird Sanctuary which provides bird habitat in a significant migratory stopover site while providing resources for residents to engage in bird-watching and in-

crease public education programming to protect bird habitat ("Biodiversity Strategy," 2019, p. 43). These activities highlight the distributional multispecies justice category of equitable access to resources to support flourishing as stewardship initiatives allow anyone in the city to come together to care for the land and its wildlife within city spaces. Such activities can also strengthen procedural multispecies justice, as the knowledge gained from participation can be brought to planning and development processes, and strengthen the capacity of local communities to engage in decision-making (da Schio, 2022).

Functional examples of distributional multispecies justice in the use of biodiversity-sensitive practices and the implementation of equitable "universal design" are also found in the Biodiversity Strategy. For example, the ongoing initiative of The Meadoway is "an initiative to revitalize a hydro corridor in Scarborough from mown grass into a meadow that provides high functioning biodiverse pollinator habitat," which will create a functional corridor for both human and animal use ("Biodiversity Strategy," 2019, p. 20). Several actions for implementation build on these inclusive initiatives, such as Action 7: Develop best practice guidelines for buffers adjacent to major new developments ("Biodiversity Strategy," 2019, p. 47), and Action 14: Identify and construct 'eco-passages' and 'wildlife corridors' ("Biodiversity Strategy," 2019, p. 50). The idea of interconnectedness is a key theme in the Biodiversity Strategy, appearing in public consultation, as well, where suggestions included ensuring that principles driving the strategy "demonstrate that human and natural ecosystems are interconnected" and not distinct, and that actions should promote "co-existence between residents and wildlife" ("Biodiversity Strategy Consultation Report," 2019, p. 11), which is an important step in advancing equity.

3.3. Nature and Biodiversity in TransformTO

Nature in TransformTO is mostly framed around its usefulness to provide ecosystem services to residents in the City. There is some discussion of the value of healthy biodiversity for wildlife from public consultation ("TransformTO Public Consultation Report," 2021, p. 32), but these sentiments do not carry over to the Net Zero Strategy. The only action for implementation in the Strategy that mentions nature is Action 17: Increase canopy cover and biodiversity and enhance greenspaces, and its sub-action, Action 17A: Achieve equitable distribution of the urban forest, increasing tree canopy and natural greenspace where it is most needed, is justified because:

> Toronto's urban forest is a vital city asset that contributes to quality of life and healthy communities. The city's tree population helps to filter air pollution and save energy by helping to cool neighborhoods and buildings in the summer. Trees also sequester carbon as they grow. A well-managed urban forest is vital to quality of life and supports climate resilience, disaster risk reduction, ecosystem conservation, food security, poverty alleviation and an improved quality of life. Equitable distribution of the city's tree canopy brings with it a more equitable distribution of the services and benefits provided by trees and greenspace. ("TransformTO Net Zero Strategy," 2021, p. 78)

While it is possible that "a more equitable distribution of the services and benefits provided by trees and greenspace" ("TransformTO Net Zero Strategy," 2021, p. 78) includes services and benefits to animals, this is not clear. It is most likely that nature is being framed in TransformTO as a tool to achieve net zero, and advance equity for vulnerable populations susceptible to the severe impacts of climate change by enhancing greenspaces in equity-deserving communities in the City.

3.4. Nature and Wildlife in the Biodiversity Strategy

Nature in the Biodiversity Strategy is conflictingly framed as being beneficial both for the ecosystem services it provides to residents in the City, but also for its inherent value. For example, it is stated in the Biodiversity Strategy that "our health, well-being, and economic prosperity depend on nature" ("Biodiversity Strategy," 2019, p. 11). This can be connected to a nativist theme in the Strategy, which sees discourse and actions protecting native species over invasive or migrating species ("Biodiversity Strategy," 2019, pp. 47-50), and the Strategy seeks to keep common species common as an approach to promote ecological integrity to ensure the continued provision of ecosystem services ("Biodiversity Strategy," 2019, pp. 15, 46-50).

However, there is also extensive discourse supporting the intrinsic value of biodiversity in the City, and that it should be protected, restored, and enhanced for its own sake and wellbeing. For example, an extensive list of actions for implementation seek to support the flourishing of wildlife, such as Action 9: Identify opportunities and priority sites for restoration, including estab-

lishing refuge and stopovers for species such as birds and butterflies ("Biodiversity Strategy," 2019, p. 48). These types of initiatives seek to address the issue of human exceptionalism around how nature is understood and framed, as these actions, on the surface, do not have immediate benefits for humans, and those that do, such as The Meadoway, realize benefits in an interconnected, equitable way. Indeed, this is reflected in Principle 2 of the Biodiversity Strategy: "Biodiversity has intrinsic value… Biodiversity is essential to life on earth and must be respected and protected regardless of its value to humans" ("Biodiversity Strategy," 2019, p. 45). Thus, there is a dominant frame of nature having intrinsic value in the Biodiversity Strategy, even though its protection may come into conflict with actions that support the provisioning of ecosystem services to humans.

4. DISCUSSION

In this section, I identify two main arguments resulting from the analysis above: 1) the benefits and burdens to animals are not being considered to the extent that a multispecies justice approach allows, and, 2) there is an assumption of actions achieving equity in both strategies. There is then a discussion on the implications of these arguments for urban planning from a multispecies justice perspective, as well as the advantages and limitations of using the multispecies justice framework to guide urban sustainability planning and implementation.

4.1. Benefits and Burdens Not Considered to the Full Extent

The multispecies justice framework created for this analysis allows space for the wellbeing of animals alongside humans in sustainability planning and implementation. However, in the TransformTO Net Zero Strategy, animals are given little room in urban areas. The only action in the Net Zero Strategy that mentions nature in any way is Action 17: Increase canopy cover and biodiversity and enhance greenspaces ("TransformTO Net Zero Strategy," 2021, p. 78). This is despite the recognition from both public and Indigenous consultation noting the importance of sustaining wildlife in the city through native tree canopies and greenspaces to promote "collective wellbeing" ("TransformTO Indigenous Climate Action Report," 2018, p. 5; "TransformTO Public Consultation Report," 2021, p. 32). However, Action 17 in TransformTO is justified as a tool to prioritize the ecosystem services that nature can provide to human residents, such as filtering air pollution and cooling neighborhoods and buildings ("TransformTO Net Zero Strategy," 2021, p. 78). This perpetuates the idea that net-zero carbon strategies in urban areas have little room for addressing equity for animals, and that any benefits to animals accrued from reduced emissions would just be a side-effect of actions targeting humans, or more generally, net-zero goals.

Additional actions based in diversifying biodiversity-sensitive practices across the City could have been included in the Net Zero Strategy, as Pan et al. (2023) find that "[nature-based solutions] in the residential, transport and industrial sectors could reduce urban carbon emissions by up to 25%" (pp. 862-863). To align nature-based solutions with multispecies justice, such interventions should prioritize "the most at-risk places and communities" who "stand to suffer significant climate and disaster losses" (Boyland et al., 2022, p. 4), which includes at-risk urban animals. For example, "research has shown that oaks benefit everything from caterpillars to songbirds. Even fish prosper, because the aquatic invertebrates they feed on favor oak leaves on stream bottoms" (Conniff, 2014). Further, urban spaces can attract more birds "by breaking up endless lawns with the right kinds of shrubs" (Conniff, 2014), which can create refuge and promote connectivity between wild spaces (Parris et al., 2018).

The implementation of biodiversity-sensitive practices in the Biodiversity Strategy similarly does not take into account the benefits and burdens that vulnerable animals will realize. The common theme of ecological integrity in the Biodiversity Strategy can be understood as "an unimpaired condition or the quality or state of being complete or undivided; it implies correspondence with some original condition" (Karr, 1996, pp. 100-101). Ecological integrity as a measurement approach is in line with contemporary conservation practice that promotes removing invasive species and "adjusting abiotic elements" to increase integrity, with "system-wide changes in function usually seen as losses of integrity" (Rohwer & Marris, 2021, p. 3).

However, ecological integrity can pose a key issue in challenging the ability of biodiversity to persist through tough times. Modern conservation discourse does do a better job of recognizing that ecosystems are complex, dynamic, and constantly evolving in response to external pressures (Hobbs et al., 2006; Karr, 1996; Pickett, 2013; Rohwer & Marris, 2021; Wallach et al., 2018), but the nativist lens that persists even in modern conservation fails to recognize that invasive species may be "climate refugees" (Rohwer & Marris, 2021, p. 7) or

other threatened or endangered species that are shifting their ranges in response to climate change to survive, pursuing their own needs as subjects-of-a-life with inherent value. Human intervention through the extensive control of ecosystems and invasive species "could increase the chances of their global extinction" (Rohwer & Marris, 2021, p. 7), and challenges multispecies justice in failing to consider the agency and interests of disenfranchised humans and animals, as well as failing to equitably distribute environmental goods to support their flourishing.

Similar to TransformTO, ecological integrity seems to be conflated with ecosystem services, and a change in ecosystem can result in a loss of value of what the current ecosystem is providing. For example, it is noted that "Toronto's urban forest is estimated to provide over $28 million annually in ecosystem services including energy savings, carbon sequestration, pollution removal and avoided runoff" ("Biodiversity Strategy," 2019, p. 27). Focusing on ecosystem services can lead to anthropocentric, exclusionary framings of justice for humans and animals as it disregards the inherent value of subjects-of-a-life who have no direct value to certain humans. In order to align conservation action with multispecies justice, ecological integrity should be revised to ecological health, where health "implies a flourishing condition, well-being, vitality, or prosperity" (Karr, 1996, p. 101), which would allow humans to recognize that animals, and the urban ecosystems they call home, have inherent value, leading to distributional multispecies justice in the equitable allocation of environmental goods that support the flourishing of humans and animals and their habitats.

4.2. Assumption of Equity in TransformTO and the Biodiversity Strategy

As noted above in how equity is framed in TransformTO, the City clearly prioritizes achieving equity through the Net Zero Strategy. Twenty-four of thirty total implementable actions are identified by the City to have equity benefits, and some of these actions do have the potential to be just towards equity-seeking groups. However, several actions identified as having equity benefits by the City are based on an assumption of realizing justice for equity-deserving communities. For example, Action 7: Actively support, advocate to and partner with Toronto Hydro, as well as the Provincial and Federal governments and agencies, to decarbonize the provincial electricity grid, promote energy conservation and enable local renewable energy generation ("TransformTO Net Zero Strategy," 2021, p. 60) is identified as having equity benefits by the City, assuming that making buildings net-zero carbon will automatically generate justice for equity-seeking groups. However, assuming that equity can be delivered through actions or initiatives that do not practically outline in specific terms how they will generate equity in inclusive and meaningful ways creates a promise to vulnerable groups that may not be seen through, perpetuating distrust and injustice in urban governance.

More effective, equity-oriented public engagement may better consider the lived experiences of vulnerable populations in the City. One way to inform more meaningful distributional multispecies justice is to ensure that participatory processes are intentionally representative of subpopulations so that diverse voices are heard, and that the intersections between the climate crisis and experienced social injustices are central to decision-making processes (Brown, 2023; "Yale Experts Explain Intersectionality and Climate Change," n.d.).

The Biodiversity Strategy shows more evidence for distributional multispecies justice across all three subcategories. For example, discourse on The Meadoway in the Biodiversity Strategy exemplifies the implementation of equitable "universal design" for humans and animals, supporting the flourishing of all beings in common ways (Coulthard, 2014; Cousins, 2021; Parris et al., 2018). However, there are also several examples of initiatives or implementable actions that fall under a stewardship umbrella, promoting residents to "get involved" in the endeavor to access biodiversity. For example, the Community Stewardship Program, which engages resident volunteers in restoration and monitoring activities, seeks to instill a sense of ownership and care towards nature in the City ("Biodiversity Strategy," 2019, p. 42). Further, actions focused on seeking out biodiversity in the City encourage residents to access biodiversity for themselves to engender a sense of stewardship and support for the city's wildlife, such as Action 21: Develop a self-guided 'biodiversity in the City' tour ("Biodiversity Strategy," 2019, pp. 52-53).

While instilling care and compassion for wildlife and nature in the city is a positive outcome for these types of actions, this category of distributional multispecies justice seems unexpected. Distributional environmental justice, as per Anguelovski et al. (2020), is whether greening interventions address historic social, racial and cultural inequities through the equitable distribution of environmental benefits and burdens. In terms of urban greening, distributional multispecies justice

would ensure that vulnerable communities can, for example, equitably access tree cover that promotes pollution reduction and heat mitigation, and such tree cover would also be acceptable habitat for vulnerable animals. However, while Action 21 in the Biodiversity Strategy, for example, does seek to promote access to biodiversity, distributional justice should seek to provide such access where vulnerable groups already are. Instead, these actions draw out residents to access biodiversity and urban nature on their own terms, in their own time, leaving the distribution of environmental benefits in actual vulnerable or marginalized neighborhoods absent.

4.3. Implications for Urban Sustainability Planning from a Multispecies Justice Perspective

These two City of Toronto plans have considered how sustainability actions can either benefit humans, or animals, perpetuating human-nature dualisms, and upholding the argument made by Houston et al. (2018) that "urban planning has a history of viewing cities as somehow separate from nature… failing to see how humans and nonhuman animals co-construct urban life worlds" (p. 192). Indeed, the TransformTO Net Zero Strategy fails to consider the extent to which net-zero carbon actions can benefit animals, and the Biodiversity Strategy leaves out how urban greening actions will benefit vulnerable humans in accessing resources to support flourishing.

This has implications for urban sustainability planning as it furthers an anthropocentric view that only certain animals belong in cities that are tolerable to humans who claim ownership of urban spaces, and that "the legitimacy of wild animals' claims on shared urban spaces often remains contingent on their good behavior" (Hunold & Mazuchowski, 2020, p. 2). This is seen in both TransformTO and the Biodiversity Strategy through the promotion of native species, mostly flora, and small animals, like songbirds. However, this fails to promote co-existence between humans and vulnerable animals who are continuously threatened by both climate change impacts and human interventions. It is common practice for sustainability strategies in cities to separate plans for humans and those for wildlife. Separating humans and animals can lead to humans becoming disconnected to the needs of vulnerable wildlife in urban areas, perpetuating injustices for those animals seeking refuge in urban spaces (Beery et al., 2023). More is needed to bring urban animals into sustainability planning to recognize their right to the city alongside humans (Hubbard & Brooks, 2021; Shingne, 2020).

Further, this discourse analysis reveals that equity should not just be an add-on benefit to technocentric net-zero carbon approaches. Framing climate action around net-zero is based in a trend "of the continuing reduction of climate action to numerical target setting" (Khosla et al., 2023, p. 2), reflected in the TransformTO targets of achieving net-zero by 2050. Seeing climate action numerically represents the reduction of carbon dioxide emissions as a distributive good, or benefit, but "may also generate new—or worsen pre-existing—inequalities in society" (Newell & Mulvaney, 2013, as cited in Sovacool et al., 2019, p. 582) by, for example, not considering higher energy costs, or access to electric vehicles (Sovacool et al., 2019). Indeed, "each ton of carbon dioxide emitted, not emitted, or removed has a distinct set of equity implications, depending on when and where it is produced, and whose prosperity it advances" (Khosla et al., 2023, p. 3).

This can be rectified through more democratic participation specifically inclusive of "a wide range of actors" (Sovacool et al., 2019, p. 582), just as what the multispecies justice framework promotes. Similar discourse is also apparent in the Biodiversity Strategy in distributional multispecies justice through community stewardship, where "community" is "an amorphous entity that conjures up ideas of good, engaged citizens doing their part" (Wijsman & Berbes-Blazquez, 2022, p. 384). This has implications for urban sustainability planning as it cannot be assumed that generalized urban greening actions will benefit all humans and animals. This too can be rectified through more meaningful participatory processes "by engaging those who are most impacted in the creation of solutions" (Wijsman & Berbes-Blazquez, 2022, pp. 383-384). Thus, engaging with the multispecies justice framework in creating urban sustainability plans can address shortcomings in ensuring that historic and social injustices are recognized, that diverse voices and issues are included in meaningful participation, and that practical solutions to address climate injustices are planned for and implemented where they are most needed.

4.4. Conclusion

Based on a discourse analysis about how equity and nature are framed in two sets of municipal sustainability plans from the City of Toronto, I have argued that the benefits and burdens to animals are not being considered to the extent that a multispecies justice approach allows, and that there is an assumption of actions achieving equity in both strategies. The multispecies justice

framework used in this paper may be useful for other cases since it follows the established approach that is found in urban sustainability schemes around framing policies within the three pillars of justice (Anguelovski et al., 2020; Bulkeley et al., 2014; Meerow et al., 2019; Schlosberg, 2004; Schlosberg, 2007; Sovacool et al., 2019; Wijsman & Berbes-Blazquez, 2022). This framework expands on the three pillars of justice by building on a growing literature stressing the need for co-existence in urban spaces between humans and animals (Houston et al., 2018; Hubbard & Brooks, 2021; Hunold & Mazuchowski, 2020; Kellogg, 2023; Shingne, 2020; Steele et al., 2015; Steele, 2021; Wallach et al., 2018), as well as elaborating on procedural and recognitional justice so urban governance planning can authentically consider how sustainability actions will impact vulnerable groups through a bottom-up approach.

While it is accepted that an intersectional approach is needed to understand how vulnerable human groups are impacted by climate change, "animal rights are still treated as a fringe issue and often as something non-serious" (Kateman, 2023). Engaging with this multi-species justice approach is beneficial in that it is grounded in a more inclusive intersectional understanding of how vulnerable humans and animals experience sustainability challenges through similar structural injustices. By utilizing multispecies justice principles in navigating conflicts, the most mutually beneficial outcomes for vulnerable groups can be arrived upon.

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DECLARATION OF INTEREST

The author reports there are no competing interests to declare.

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