

# Animal Care Organization Survey

## Survey Flow

**Block: Consent (2 Questions)**

**Branch: New Branch**

**If**

**If org Organization that does not take in stray, abandoned, and/or owner-surrendered domestic rabbits Is Selected**

**Or country Other country Is Selected**

**EndSurvey:**

**Standard: Inclusion criteria (4 Questions)**

**Standard: Animal control contracts, staff/volunteers picking up strays, and sheltering (3 Questions)**

**Standard: Foster care, transfers, euthanizing, capacity limits, and waiting lists (9 Questions)**

**Standard: Rabbit numbers (4 Questions)**

**Standard: Rabbit Hemorrhagic Disease Virus 2 (RHDV2) (2 Questions)**

**Standard: Final thoughts & exiting survey (4 Questions)**

Page Break

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## Start of Block: Consent

Q1



ONTARIO  
VETERINARY COLLEGE  
DEPARTMENT OF POPULATION MEDICINE

## Q2 CONSENT TO PARTICIPATE IN RESEARCH

### ***Domestic rabbit abandonment and relinquishment study: Animal care organization survey***

You are invited to participate in a research project conducted by Carol Tinga (PhD Candidate) under the supervision of Dr. Lee Niel (Associate Professor) from the Department of Population Medicine, Ontario Veterinary College, University of Guelph.

If you have any questions or concerns about the consent process or this research, please contact the researchers: Carol Tinga ([tingac@uoguelph.ca](mailto:tingac@uoguelph.ca)) or Dr. Lee Niel ([niell@uoguelph.ca](mailto:niell@uoguelph.ca)).

### **PURPOSE OF THE STUDY**

The purpose of this study is to understand the nature and scale of domestic rabbit strays, abandonment and relinquishment in Canada and the United States before and during the COVID-19 pandemic. This study has several parts and you are being asked to participate in one part so we can understand the perspectives of animal care organizations regarding domestic rabbits found stray, abandoned, and relinquished before and during the COVID-19 pandemic.

The results of this study will be useful for developing educational materials for current rabbit owners, people thinking about taking on rabbit companions, and others interested in the care and welfare of domestic rabbits during crisis and non-crisis times. The results will also be useful for researchers like ourselves for planning future research about human-rabbit relationships and rabbit welfare.

## INFORMATION ABOUT PARTICIPATION

Participants in this research must:

- Represent an animal care organization (e.g., animal shelter, animal rescue, humane society, rabbit-focused group, rabbit rescue, rabbit society, rabbit charity) that:
  - takes in stray, abandoned, and/or owner-surrendered domestic rabbits, *and*
  - is based in Canada or the United States
- Ensure that only one survey is completed for the organization to prevent duplication of responses

Participation will involve completing an **anonymous online survey that will take approximately 10 minutes**. The survey includes questions about the organization, its activities and services regarding domestic rabbits, domestic rabbit counts if available (total numbers taken in, numbers of strays/abandoned, numbers of owner surrenders) for 2017-2022, and the effect (if any) of Rabbit Hemorrhagic Disease Virus 2 (RHDV2) on intakes. Participants will be able to return to the survey on the same device at a later time (up to one week after their last entry) to complete the survey if necessary.

## WITHDRAWAL FROM THE STUDY

Participation is completely voluntary. You may discontinue participation in the study at any time by exiting the survey. We will only use your data for the study if you submit your responses at the end of the survey, otherwise your responses will be discarded. Once your responses are submitted, we will not be able to remove your responses since they will not be associated with your organization's identity.

## RISKS AND BENEFITS

You may feel uncomfortable or upset thinking about the survey questions, but you are free to skip questions you do not wish to answer. The survey is anonymous and no identifying information will be collected (e.g., no participant or organization names, no email addresses), so it is highly unlikely that you or your organization's identity could ever be linked with your responses. Exact quotes from survey answers may be used in publications and presentations, but no one will be able to identify the participants or organizations who wrote them because we are not tracking these identities.

Participation in this research will provide information about recent trends which might help to predict and prevent future relinquishments through educational efforts. This research will also inform future research that may benefit people, rabbits, and animal care organizations in crisis and non-crisis times. If you would like to learn more about the results of this study and others completed by our research group, please watch for updates on our Facebook page (OVC Companion Animal Behaviour and Welfare Lab) and website (<https://niel-lab.uoguelph.ca/>). You do not require a Facebook account to access our page.

## CONFIDENTIALITY

Your participation and your responses to this survey will be anonymous. All researchers are bound by confidentiality. The results will be collected online and demographic information collected about organizations (i.e., province, territory, state) will be too general to single out and identify organizations. All data collected for this survey will be stored on a password-protected computer. Please note that confidentiality cannot be guaranteed while data are in transit over the internet. Results of this survey will appear in Carol Tinga's PhD thesis and will be published in a peer-reviewed journal(s) and in non-academic forms. Results will also be presented at scientific conferences and other public presentations. We may publish through an Open Access journal and make the data for this study public. This would include the information that you provide about your organization (e.g., Canadian province/territory,

US state).

### **RIGHTS OF RESEARCH PARTICIPANTS**

This project has been reviewed by the University of Guelph Research Ethics Board (REB) for compliance with federal guidelines for research involving human participants. You are not waiving any legal claims, rights, or remedies because of your participation in this research study. **If you have any questions regarding your rights and welfare as a research participant in this study (REB #22-05-013), please contact: Manager, Research Ethics, University of Guelph, [reb@uoguelph.ca](mailto:reb@uoguelph.ca), 519-824-4120 x56606.**

Please print or save a copy of this consent form for your records.

DO YOU CONSENT TO PARTICIPATE IN THIS STUDY?

☐ Yes (1)

☐ No (2)

*Skip To: End of Survey If Q2 = No*

**End of Block: Consent**

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**Start of Block: Inclusion criteria**

Q3 Please indicate the nature of your animal care organization

- ☐ Organization has a broad species focus (e.g., animal shelter, animal rescue, humane society) that includes taking in stray, abandoned, and/or owner-surrendered domestic rabbits (1)
- ☐ Rabbit-focused organization (e.g., rabbit rescue, rabbit society, rabbit charity) that takes in stray, abandoned, and/or owner-surrendered domestic rabbits (2)
- ☐ Organization that does not take in stray, abandoned, and/or owner-surrendered domestic rabbits (3)
- ☐ Other – please describe (4)
- 

*Skip To: End of Survey If Q3 = Organization that does not take in stray, abandoned, and/or owner-surrendered domestic rabbits*

Q4 Where is your organization based?

- ☐ Canada (1)
- ☐ United States of America (2)
- ☐ Other country (3)

*Skip To: End of Survey If Q4 = Other country*

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*Display This Question:*

*If Q4 = Canada*

Q5 In which province/territory is your organization based?

- ☐ Ontario (1)
- ☐ Quebec (2)
- ☐ Nova Scotia (3)
- ☐ New Brunswick (4)
- ☐ Manitoba (5)
- ☐ British Columbia (6)
- ☐ Prince Edward Island (7)
- ☐ Saskatchewan (8)
- ☐ Alberta (9)
- ☐ Newfoundland & Labrador (10)
- ☐ Northwest Territories (11)
- ☐ Yukon (12)
- ☐ Nunavut (13)

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*Display This Question:*

*If Q4 = United States of America*

Q6 Where in the United States of America is your organization based?

- ☐ Alabama (1)
- ☐ Alaska (2)
- ☐ Arizona (3)
- ☐ Arkansas (4)
- ☐ California (5)
- ☐ Colorado (6)
- ☐ Connecticut (7)
- ☐ Delaware (8)
- ☐ District of Columbia (9)
- ☐ Florida (10)
- ☐ Georgia (11)
- ☐ Hawaii (12)
- ☐ Idaho (13)
- ☐ Illinois (14)
- ☐ Indiana (15)
- ☐ Iowa (16)
- ☐ Kansas (17)
- ☐ Kentucky (18)
- ☐ Louisiana (19)
- ☐ Maine (20)
- ☐ Maryland (21)
- ☐ Massachusetts (22)

- ☐ Michigan (23)
- ☐ Minnesota (24)
- ☐ Mississippi (25)
- ☐ Missouri (26)
- ☐ Montana (27)
- ☐ Nebraska (28)
- ☐ Nevada (29)
- ☐ New Hampshire (30)
- ☐ New Jersey (31)
- ☐ New Mexico (32)
- ☐ New York (33)
- ☐ North Carolina (34)
- ☐ North Dakota (35)
- ☐ Ohio (36)
- ☐ Oklahoma (37)
- ☐ Oregon (38)
- ☐ Pennsylvania (39)
- ☐ Puerto Rico (40)
- ☐ Rhode Island (41)
- ☐ South Carolina (42)
- ☐ South Dakota (43)
- ☐ Tennessee (44)
- ☐ Texas (45)



- ☐ Utah (46)
- ☐ Vermont (47)
- ☐ Virginia (48)
- ☐ Washington (49)
- ☐ West Virginia (50)
- ☐ Wisconsin (51)
- ☐ Wyoming (52)

**End of Block: Inclusion criteria**

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**Start of Block: Animal control contracts, staff/volunteers picking up strays, and sheltering**

Q7 Does your organization have an animal control contract with another organization (e.g., municipal or state animal control agency) that picks up stray domestic rabbits that your organization takes in?

- ☐ Yes (1)
  - ☐ No (2)
  - ☐ Prefer not to say (3)
- 

Q8 Do members of your organization (e.g., staff, volunteers) pick up stray domestic rabbits?

- ☐ Yes (1)
  - ☐ No (2)
  - ☐ Prefer not to say (3)
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Q9 Does your organization have the physical capacity to shelter domestic rabbits? This can include sheltering in people's homes.

- ☐ Yes (1)
- ☐ No (2)
- ☐ Prefer not to say (3)

**End of Block: Animal control contracts, staff/volunteers picking up strays, and sheltering**

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**Start of Block: Foster care, transfers, euthanizing, capacity limits, and waiting lists**

Q10 Does your organization coordinate foster care for domestic rabbits?

- ☐ Yes (1)
  - ☐ No (2)
  - ☐ Prefer not to say (3)
- 

Q11 Does your organization transfer domestic rabbits in from other organizations?

- ☐ Yes (1)
  - ☐ No (2)
  - ☐ Prefer not to say (3)
- 

Q12 Does your organization transfer domestic rabbits out to other organizations?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Prefer not to say (3)

Q13 Does your organization euthanize healthy rabbits?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Prefer not to say (3)

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*Display This Question:*

*If Q13 = Yes*

Q14 In what situations might healthy rabbits be euthanized?

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Q15 Has your organization ever had to turn away people requesting to surrender rabbits because you were at capacity for sheltering, fostering, or rehoming domestic rabbits?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Prefer not to say (3)

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*Display This Question:*

*If Q15 = Yes*

Q16 In what year(s) did you have to turn away people requesting to surrender rabbits? If your organization did not exist in a particular year, please answer "Not applicable" for that year.

	Yes (1)	No (2)	Unsure (3)	Not applicable (4)
2017 (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2018 (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2019 (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2020 (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2021 (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2022 (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Q17 If your organization is at capacity for domestic rabbit care, can people requesting to surrender rabbits go on a waiting list?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Prefer not to say (3)

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*Display This Question:*

*If Q17 = Yes*

Q18 In what years have you had people on a waiting list to surrender rabbits? If your organization did not exist or did not have a waiting list in a particular year, please answer "Not applicable" for that year.

	Yes (1)	No (2)	Unsure (3)	Not applicable (4)
2017 (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2018 (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2019 (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2020 (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2021 (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2022 (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**End of Block: Foster care, transfers, euthanizing, capacity limits, and waiting lists**

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**Start of Block: Rabbit numbers**

Q19 Does your organization record the number of domestic rabbits that it takes in separate from other species it takes in?

- ☐ Yes (1)
  - ☐ No (2)
  - ☐ Prefer not to say (3)
- 

*Display This Question:*

*If Q19 = Yes*

Q20 Please provide the following information about domestic rabbits taken in by your organization. If your organization did not exist in a particular year, please insert an X in the "Not applicable" box for that year.

	<b><u>Total number</u></b> of all types of domestic rabbit intakes (e.g., born on site, stray, abandoned, owner surrender, adoption return, confiscated, transferred from another organization) (1)	Number of <b><u>stray &amp; abandoned</u></b> domestic rabbits <b><u>only</u></b> (2)	Number of <b><u>owner surrendered</u></b> domestic rabbits <b><u>only</u></b> - please exclude adoption returns (3)	Not applicable (4)
<b>2017</b> (1)				
<b>2018</b> (2)				
<b>2019</b> (3)				
<b>2020</b> (4)				
<b>2021</b> (5)				

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Display This Question:

If Q19 = Yes

Q21 Please provide the following information about domestic rabbits taken in by your organization in 2022.

	<b><u>Total number</u></b> of all types of domestic rabbit intakes (e.g., born on site, stray, abandoned, owner surrender, adoption return, confiscated, transferred from another organization) (1)	Number of <b><u>stray &amp; abandoned</u></b> domestic rabbits <b><u>only</u></b> (2)	Number of <b><u>owner surrendered</u></b> domestic rabbits <b><u>only</u></b> - please exclude adoption returns (3)
<b>2022</b> (1)			

Display This Question:

If Q19 = Yes



Q22 How many months of 2022 does this include? For example, if the data shared above covers January 2022 until mid-March 2022, then the answer would be 2.5 months; if the data covers to the end of April 2022, then the answer would be 4 months.

End of Block: Rabbit numbers

Start of Block: Rabbit Hemorrhagic Disease Virus 2 (RHDV2)

Q23 Has Rabbit Hemorrhagic Disease Virus 2 (RHDV2) affected your organization's ability to take in domestic rabbits?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Unsure (3)

*Display This Question:*

*If Q23 = Yes*

Q24 In what years did Rabbit Hemorrhagic Disease Virus 2 (RHDV2) affect your organization's ability to take in domestic rabbits? If your organization did not exist in a particular year, please answer "Not applicable" for that year.

	Yes (1)	No (2)	Unsure (3)	Not applicable (4)
2017 (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2018 (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2019 (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2020 (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2021 (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2022 (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**End of Block: Rabbit Hemorrhagic Disease Virus 2 (RHDV2)**

**Start of Block: Final thoughts & exiting survey**

Q25 Has the COVID-19 pandemic affected your organization's ability to care for domestic rabbits?

- ☐ Yes (1) \_\_\_\_\_
- ☐ No (2)

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Q26 Are you noticing anything different about the rabbits found stray or abandoned, or being relinquished in 2022 compared to before (e.g., younger, more behaviour issues)?

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Q27 Is there anything else that you would like to tell us about domestic rabbits and your organization's role in caring for them?

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Q28 Would you like to submit your survey?

- ☐ Yes (1)
- ☐ No (2)

**End of Block: Final thoughts & exiting survey**

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#### DETAILED QUALITATIVE RESULTS

Organizations' comments about the following three items were analyzed: (1) how the COVID-19 pandemic affected rabbit care, (2) rabbits seen in 2022 versus previously, and (3) additional thoughts about domestic rabbits and their care.

**Item 1: Comments about how the COVID-19 pandemic affected the organization's ability to care for domestic rabbits (n = 55)**

Of the 57 organizations affected, 55 shared more details. Organizations described 3 primary themes: reduced rabbit intake and adoptions, multiple factors simultaneously impacting organizations, and resource problems.

***Reduced rabbit intake and adoptions***

Reduced rabbit intake was a common theme with many organizations with comments about not taking in any rabbits, declining surrender requests, taking in only strays or emergency cases, and growing their waiting lists to adapt to reduced capacity e.g., "During 2020, [we] had to default to emergency intake only due to uncertainty around being able to stay open, and modifications made to staffing levels to ensure [we] could continue operations" [P32]. One organization [P49] reduced rabbit capacity to accommodate more cats. Additionally, participants described how the pandemic also affected their organization's ability to get rabbits adopted. Some organizations lost the opportunity to hold adoption events and adoption appointments on-site and/or at partner or pet stores, which impacted intakes. One participant explained: "With pet stores being closed it was difficult to place them once we get [sic] them into our care. For that reason we had to reduce our intakes as much as possible" [P23]. Although organizations wrote overwhelmingly of challenges, two reported more adoptions during this period. For one organization, this eventually led to a new challenge with returns and surrenders: "We saw a huge surge in adoptions in 2020, but the returns and new surrenders are at an all time high starting around August 2021" [P48].

***Multiple factors simultaneously impacting organizations***

Many organizations described multiple factors simultaneously impacting usual operations, including reduced donations, staff, volunteers, adoption events and appointments, fundraising and foster opportunities, and access to supplies, including food, e.g., "Reduced donations, reduced foster capacity, reduced access to supplies" [P12]. Another participant stated: "It was difficult to access markets for animal feeds also giving away and receiving more animals was halted" [P30], while P37

reported that “We are drastically short of volunteers and our fundraising is challenged” [P37].

Organizations identified the co-occurrence of the COVID-19 pandemic and the emergence of RHDV2 in Canada and the United States as creating an extra burden as they had to adapt to even more challenges such as arranging quarantines, vaccination expenses, and even longer lengths of stay for rabbits e.g., “It has slowed down our ability to take in new animals and has added to the amount of time that they need to spend in rescue while they wait to get their vaccinations” [P40]. In contrast, one organization described multiple positive effects of the COVID-19 pandemic, including increased donations of green vegetables, increased adoptions, and a highly successful online fundraiser. For two organizations, staying open was a challenge, as exemplified in the following quote from 2022:

We were no longer allowed in partner stores ([pet store 1]) or ([pet store 2]) to do adoption events or even set up to do adoption appointments. We still currently are not allowed back in [pet store 1], primarily due to ban from Corp Office concerning RHVD. We have been allowed to do adoption appointments at [pet store 2] only and that was allowed about 8 months ago. We have been turning everything away except rabbits coming in as strays to our partner municipal shelter ([service 1, service 2]). On top of everything we have dealt with from Covid, to RHVD ban on operations through Corporates [sic] politics, our spay and neuter Vet has since retired so now we are still hunting for a Vet partner to do our spays/neuters at a low cost for our non profit. We have not had a spay/neuter Vet now for approx. 6 months. These things have been determinantal [sic] to our operations and we have even had to consider closing our doors because we just don't have the support we need. [P5]

### ***Resource problems***

Resource issues were mentioned frequently by organizations. Human resource problems were mentioned most and revolved around staff and volunteer shortages e.g., “No volunteers or additional staff for [the] first 2 years of [the] pandemic” [P6]. Another participant reported that, “Limited staff resulted in the inability to care for numerous rabbits in shelter” [P18], while P44 said that, “Yes, we reduced staff numbers and closed to the public for the first part of the pandemic, not taking in any surrenders ...”. Some organizations running foster programs, a type of volunteer program, reported challenges to their foster capacity and how they usually assessed new foster applicants: “It was much harder to vet fosters without visiting their home. A walk-through on Zoom was okay but not the same” [P16]. Other resource problems revolved around finances, reduced access to supplies, less time to exercise rabbits, and lack of appropriate rabbit housing, e.g., “We

really do not have appropriate housing or segregation for them in our facility” [P22]. Financial issues were due to fundraising challenges and reduced donations as stated by P38: “Donations go down which effects [sic] us the most as that's how we stay open” [P38]. For one organization facing RHDV2, vaccine costs were a problem: “Yes, we quarantine any strays that we take in. All rabbits are vaccinated prior to adoption. This means that we lose money on every adoption made” [P25]. One organization was able to partially “offset a dip in donations and keep up with operating and care costs” with the “CERB” [Canada Emergency Response Benefit] loan” [P54].

**Item 2: Comments describing differences seen in rabbits found stray or abandoned, or being relinquished in 2022, compared to before (n = 79)**

We asked the organizations if they were noticing anything different about the rabbits found stray or abandoned, or being relinquished in 2022, compared to before, and provided the following examples: “e.g., younger, more behaviour issues”. Almost all organizations (79/87, 91%) commented in some way. Most had noticed differences (48/79, 61%), but many had not (29/79, 37%) or they reported that the issue was not applicable (2/79, 3%) because they were not taking in rabbits, e.g., “not taking stray or abandoned due to RHDV2” [P8]. Organizations reported differences related to several rabbit characteristics, including age, health status, behaviour, sterilization status, appearance (i.e., breed), and sex.

The differences mentioned most were the rabbit characteristics of age and health status, but there were no clear patterns. Organizations described a mix of ages. Many said that they were seeing younger rabbits than before: “Lots of unwanted offspring being dumped” [P18] and more pregnant rabbits coming in while many others said that the rabbits they were dealing with were adults or old rabbits, e.g., “More old (> 5 years of age) rabbits are coming in” [P70]. Compared to before 2022, the health status of rabbits taken in more recently was also a mix. Many organizations reported more rabbits being taken into care with problems, e.g., “... we're seeing more with injuries” [P12]. Another participant reported that “The rabbits who've entered our care has [sic] required more medical - teeth issues, wounds, etc” [P16] while “... wet tail ...” [P17] and “... Severe cases of Sniffle & severe

Hepatic Coccidiosis" [P22] were also reported. However, many other organizations reported that more healthy rabbits were coming. One participant explained, "I've noticed recently that more dumped rabbits are actually neutered and have good temperments [sic]. Compared to before where many were in not great condition, and definitely not neutered" [P39]. Organizations had also noticed, but less frequently, changes in incoming rabbits' behaviour with several organizations reporting positive changes in the rabbit populations e.g., "Yes, most are older but more friendly" [P30]. "Younger and very social [rabbits]" [P33] were reported by an organization housing 85-120 rabbits at a time. One organization reported a negative change: "... we are noticing more behaviour issues, e.g., more aggressive ..." [P17]. Several organizations commented on the sterilization status of their rabbit populations, saying that more rabbits were already sterilized, e.g., "... Maybe 10% or more have been coming in already spayed or neutered now. ..." [P29], or that owners wanted to sterilize their rabbits: "Yes, more surrender requests. BUT also more people asking to get their rabbits spayed/neutered" [P36]. Several organizations mentioned appearance, describing more rabbits of an identifiable breed or breed characteristics than before, e.g., "Lots of REWs (red eyes white rabbits), ..." [P38]. Only one organization described a sex difference: "Vast majority of stray rabbits we rescue are females. ..." [P13].

Although we asked if organizations were noticing anything different about the rabbits themselves, many organizations used this opportunity to say more about the numbers they were seeing, breeders' practices or surrendering owners. Several organizations pointed out increased numbers of abandoned rabbits, and several organizations were feeling the pressure of nearby organizations being at capacity or of changes in their intake policies, e.g., "More abandoned rabbits because all rescues are full." [P14]. Another participant commented that "We are seeing an increase in demand for us to intake rabbits (from citizens and other rescues/shelters)" [P27]. Yet another participant stated, "yes more of them -abandonment is [a] serious issue -Shelter [sic] new intake polices [sic] [are] hurting ability for rabbit[s] to get into shelter-economic issues and lack of housing [are] other concerns" [P9]. Several organizations mentioned that a lack of pet-friendly housing was becoming a

concern, e.g., “... Lack of housing is resulting in more older rabbit requests” [P54]. Based on rabbit appearance, several organizations suspected that breeders were adding to the problem of abandoned rabbits, e.g., “More rabbits appear to be abandoned by 'backyard' breeders. Many are appearing at once, abandoned as families, and they're more often identifiable breeds” [P37]. Another participant offered, “... We also are seeing more breeder abandonments as well where several obviously related rabbits are dumped in an area. ...” [P54]. Several organizations stressed that they were dealing with more surrender requests, e.g., “The number of requests to rescue abandoned rabbits and rehome surrendered one[s] has increased a lot since April 2022” [P4]. Surrender requests included more rabbits being returned to them, e.g., “... The majority of our rabbits this year have been returns (adopted anywhere from 1-4 years prior)” [P29]. In contrast, one organization [P46] said their 2022 numbers seemed lower than in previous years and partially attributed it to a 2020 cruelty case in which 14 rabbits taken in produced many offspring. Another organization had this to say about the highs and lows of abandonments and relinquishments in 2022:

Happily, we haven't had to trap a single dumped rabbit so far this year, however, 2022 saw the most previously adopted rabbits returned to us -- 5 in July! Families are really struggling this year and we [are] seeing a greater difference in the people but not so much in the rabbits. [P11]

**Item 3: Comments in response to the final survey question requesting any additional information about domestic rabbits and the organization's role in caring for them (n = 67)**

Many participants (67/87, 77%) provided additional information about domestic rabbits and their organization's role in caring for them. A primary theme that organizations described was the capacity to care for rabbits. A few organizations had little capacity simply because they were small operations or were gearing up to take in more rabbits. Other organizations care for many rabbits, e.g., “... 180 on a daily basis” [P34], and “We house 85 to 120 rabbits from any given time. ...” [P33]. One organization only takes in “... unadoptable animals - aggressive elderly or chronically ill ...” and reported that they were “... at capacity” [P3] while others took in rabbits from other organizations because they were at risk of euthanasia for space or health reasons. Some organizations commented on the increased numbers of stray and abandoned rabbits and growing feral populations. One



organization explained how dealing with so many abandoned rabbits had affected, at least partially, their ability to deal with feral rabbits:

We do rabbit control as well as rescue, taking domestic feral rabbits out of the environment in a strategic manner. The surge of abandoned pets has zapped our resources and as we have not been able to secure development funds, we are no longer able to offer control services, even though they were successful at both removing entire feral colonies and preventing more from forming. We are now just trying to keep up with the injured rabbits and the abandoned pets. [P54]

Many organizations were dealing with a concerning number of surrender requests: “We are struggling to care for the high number of rabbits coming in and have been unable to get to anyone on our waitlist. We are getting more calls for surrender and are unable to help” [P44]. In the following example, an organization described the high volumes of intake requests in 2021 and 2022 as follows:

We don't track the intakes by type, but in 2021 and 2022 we have taken Very Few owner surrenders - because of lack of capacity. We do track intake requests. In 2021 we had 353 requests to help 575 rabbits. 301 of these were rehomes, 262 were strays. In 2022 through mid-August we had 316 requests to help 649 rabbits. 392 of these were rehomes, 244 were strays. These numbers demonstrate the dramatic increase in the rabbit problem. ... [P25]

The spread of RHDV2 was specifically mentioned as impacting capacity at many organizations, as vaccination and quarantine measures were put in place. Organizations also provided details about policy changes to intakes to reduce RHDV2 risk, e.g., “... We started limiting our intake due to RHDV2 concerns when it was found in our area (wanting to limit our in-house population) and because of the overwhelming numbers that came in 2021” [P42]. The downstream effect of quarantining rabbits also impacted capacity, e.g., “Compared to before RHD, we cannot assist as many rabbits because they have a longer length of stay due to quarantine requirements” [P55]. Rabbit capacity can be improved through foster care programs. Several organizations described challenges to their foster programs including having enough committed fosters prepared for the long stays many rabbits experience (regardless of RHDV2 threat) compared to dogs and cats, and especially after fosters went back to work after COVID-19 restrictions lifted e.g., “We had several new foster parents sign up during COVID stay-at-home 2020 but 95% of those families have now stopped fostering as everyone went back to work” [P29]. Another organization described fostering challenges in 2022 as follows:

We are always in need of more rabbit fosters, especially with this year (2022). Staff have even had to foster rabbits or we'd send multiple to the same foster, given that they have enough space to house multiple and keep them separated. [P31]

Several other organizations reported that it was hard to find committed rabbit fosters, e.g., “Despite being forewarned, some fosters are not prepared for the longer foster time compared to cats or dogs” [P14]. One organization described rabbit challenges in this comment: “They are one of the hardest species for us to find room in a foster home for, take some of the longest time getting adopted out, and there are almost always several on our waiting list” [P40]. Overall, participants described concerns about organizations’ limited capacity to care for rabbits because of long stays, and good fosters and adopters being hard to find, in addition to the effects of the COVID-19 pandemic and RHDV2 on operations, which included growing waiting lists. One organization expressed their frustration as follows: “This rabbit crisis needs to stop....I feel its [sic] putting a huge strain on care for facilities and we are all running out of options” [P22]. There was one exception [P18], however, in which an organization described declining numbers, which they attributed to providing pre-adoption sterilization, microchipping, and better housing for adopted rabbits. The practices of pre-adoption sterilization, microchipping, and better housing form part of another theme, practices identified as contributing to success, which also included pre-adoption bonding and litter training, partnerships with local pet stores and rabbit organizations to temporarily house and adopt out rabbits, providing detailed information packages for owners and prospective owners, using local media and social media, a no-questions-asked return policy, and operating only via a network of foster homes, i.e., no physical building. Contrary to the successful partnerships referred to above, one participant described the reverse situation: that the local animal services agency and their local Society for the Prevention of Cruelty to Animals take in few and no rabbits, respectively, which was making it challenging for their organization.

Two other themes were constructed from the organizations’ final comments about rabbits and rabbit care: veterinary care and education efforts. Many organizations commented on the need for veterinary care, including intake examinations, treatments for injuries and other existing problems,

RHDV2 vaccinations, and sterilizations. While veterinary care was clearly seen as necessary, several organizations described it as expensive, and therefore access to care arose as another challenge, e.g., “High costs for vet care for mandatory spay/neuter are a huge barrier” [P4]. Another participant explained, “... Often they come in to us injured or ill raising the cost of care and sadly we have lost too many that were too ill and die even with expensive and plentiful vet care- ...” [P9]. A need for low-cost sterilization clinics for rabbits owned in the community, to avoid unwanted breeding and abandoned rabbits, was also described. Microchipping was also mentioned, but it was not clear whether veterinarians were doing this procedure or the organizations themselves.

Educating owners on care and management was viewed as a worthwhile effort, e.g., “We have made informational material to help give prospective owners and owners as much information as we possibly can so that they know what they are getting into and to help make caring for their rabbit easier” [P38]. Education was especially important with the appearance of RHDV2 locally. The desire for appropriate owner education via rabbit sources was also expressed as in the following example:

... ensuring that companies selling rabbits (breeder or pet stores) are implementing good education. The standard of rabbit education that pet stores give out is not even close to the bare minimum to [care for] a healthy somewhat content rabbit.” [P39]