

Rehoming of pet rabbits (*Oryctolagus cuniculus*) in Sweden: an investigation of national advertisement

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Abstract

Rabbits (*Oryctolagus cuniculus*) are popular companion animals, yet there has been little research into rabbits kept as pets in Sweden. Many rabbits that are rehomed are done so via personal contacts rather than through animal shelters. The purpose of this study was to provide a picture as to why rabbit owners rehome their pets and to what extent this is done in Sweden. There were 505 rabbits put up for rehoming through a large Swedish advertisement site during the winter of 2012/2013. The most commonly stated reasons for trying to rehome rabbits were 'Lack of time' (35.8%), 'Owners are moving' (16.6%) and 'Allergies' (13.2%). The mean age of the rabbits was 17.6 months and most rabbits were put up for sale for a price of between €11.1 and €55. Requests about the new home were mentioned in 46.8% of the adverts and the majority of the comments described the type of home needed for the rabbit. Reasons for relinquishing rabbits were similar to those found in other studies and the number of rabbits with behavioural problems was very low (0.9%). We conclude that a number of rabbits in Sweden are experiencing rehoming and the effect of this on their welfare should be further investigated.

Keywords: animal owner, animal welfare, behaviour, pet, rabbit, rehoming

Introduction

Rabbits (*Oryctolagus cuniculus*) are the third most popular companion animal in Sweden, after cats and dogs, according to Statistics Sweden (SCB 2012). There are 76,611 (\pm 28,741) households keeping rabbits and the number of rabbits kept as companion animals in Sweden amounts to 124,611 (\pm 45,081) (SCB 2012). The reason given for acquiring a rabbit can differ depending on which age group the owner belongs to (Edbom 2011). In the report by Edbom (2011), child respondents most commonly stated that they had acquired the rabbit in order to participate in show or jumping competitions, whilst amongst adults the most commonly stated answer was that the rabbit was acquired for their children.

The incidences of unwanted pet rabbits in Sweden is poorly studied and as rabbits are easily available in pet stores and through other channels, such as advertisement sites on the internet, there is a risk of people purchasing rabbits on impulse rather than after careful consideration. A survey in the UK showed that 18% of people purchasing a rabbit in a pet store did so after deciding on that same day (Edgar & Mullan 2011), which leaves little time for new owners to prepare themselves for the long-term commitment of caring for the rabbit even if valuable advice is provided by the seller. According to the same survey, new rabbit owners had a limited knowledge of the needs of rabbits, especially regarding dietary and social needs.

Reasons for relinquishment to animal shelters were studied in four animal shelters in the US and it was shown that 27.2% of the rabbits were handed into the shelters as a result of the owners' lack of interest in their pet (Cook & McCobb 2012). Other common reasons for relinquishment were human housing issues, for example, that the owners were moving (22.1%), that the owners had too many rabbits (21.6%) or owner-related problems, such as allergies, pregnancy or illness (18.1%) (Cook & McCobb 2012). Only 3.4% of the rabbits were handed in as a result of rabbit-related problems, such as destructive behaviour (Cook & McCobb 2012). A survey of 30 animal shelters in Canada showed that 47.8% of the rabbits were handed into the shelters by their owners (Ledger 2010). Out of these, 94.7% were handed in due to owner-related circumstances, while only 5.3% were handed in as the result of behavioural problems (Ledger 2010).

Many animal shelters in Sweden concentrate their efforts on either cats or dogs whereas rabbits are taken in less frequently (Ulfsdotter & Andersson 2016, in prep). According to a UK survey, 22% of the rabbits in question were taken in by their owners as 'rescues', over half of these were acquired through friends and the rest through rescue centres (Mullan & Main 2006). This may indicate that the number of unsuccessful outcomes between pet rabbits and their owners is higher than shelter statistics imply (Mullan & Main 2006), especially in Sweden where many shelters do not accept rabbits (Ulfsdotter & Andersson 2016, in prep).

Table 1 The twelve most commonly stated reasons for putting rabbits up for sale over the three-month study period (December 2012 to February 2013) in Sweden. The percentages are calculated from all rabbits where a reason was given for relinquishment, the number of rabbits for which each reason was stated is indicated in brackets. A number of rabbits were put up for sale for more than one reason.

Reason for rehoming	Percent of rabbits
Lack of time	35.8% (125)
Owners are moving	16.6% (58)
Allergies	13.2% (46)
Lost interest	12.6% (44)
The children lost interest	5.4% (19)
Rehomed through a shelter	7.4% (26)
Lack of space	4.6% (16)
The rabbit does not get along with another rabbit/The rabbit is of the wrong sex	2.6% (9)
Have to decrease the number of rabbits	2.3% (8)
The owners are going on a trip	2.0% (7)
Changed circumstances in the family	1.1% (4)
Behavioural problems	0.9% (3)
The rabbit is bothered by children or other pets	0.9% (3)

The purpose of this study was to gain information as to why rabbit owners rehome their rabbits and the extent to which Swedish rabbit owners choose to do this through a large national website.

Materials and methods

In this study the term 'rehome' is used to describe every instance where a rabbit is moved to a new home after it has left the breeder or pet store to move to its first owner. The term 'for sale' is also used in the text as most rabbits were actually sold and not given away when they were rehomed. The study was carried out by investigating data from adverts with rabbits for sale published on the national Swedish advertisement site Blocket (www.blocket.se). Blocket has 4 million exclusive visitors every week, which is approximately 56% of Sweden's adult population (www.scb.se). Data were compiled over a three-month period; December 2012 to February 2013. Data collection was continuous but not daily. The initial search included adverts with rabbits for sale in Sweden as a whole. There were adverts that seemed to be put up again if the rabbit was not sold, but due to the method of recording it was not possible to sort these out. All search words were used in

Swedish, the English translation indicated is in brackets. The search word used was 'kanin' (rabbit) and the search was then restricted to 'djur' (animals), 'gnagare och kaniner' (rodents and rabbits) and 'privat' (private advertisers). This restricted search resulted in 128 adverts for December, 199 for January and 180 for February. The adverts selected for further analysis were those that aimed to sell or rehome rabbits for reasons other than as the direct result of breeding. Young rabbits that came directly from a breeder were excluded, as were access breeding animals (defined as: 'rabbits being sold as a result of the owner's change of direction in the breeding efforts'). In cases where it could not be determined if the rabbit came directly from a breeder or not, rabbits older than twelve weeks were included. The minimum age at which rabbits are allowed to leave their mother is six weeks according to Swedish animal welfare legislation (SJVFS 2008) and according to the regulations of the advertisement site, rabbits must be older than seven weeks to be allowed to be put up for sale (Blocket 2013a). If rabbits were put up for sale at eight weeks of age, four weeks was assumed sufficient to detect allergies or other factors preventing the new owner from keeping the rabbit.

Data analysis

Microsoft Office Excel® 2007 was used to compile and process the data. The data concerning reasons for rehoming, extent of rehoming, mean age and price of rabbits and proportion of male versus female rabbits were calculated per rabbit in order to shed light on the welfare situation for individual rabbits. This resulted in ten adverts being excluded from analysis due to the number of rabbits being unspecified. The data concerning requests regarding the new home or owner were calculated per advert in order to give an indication of owner awareness.

Results

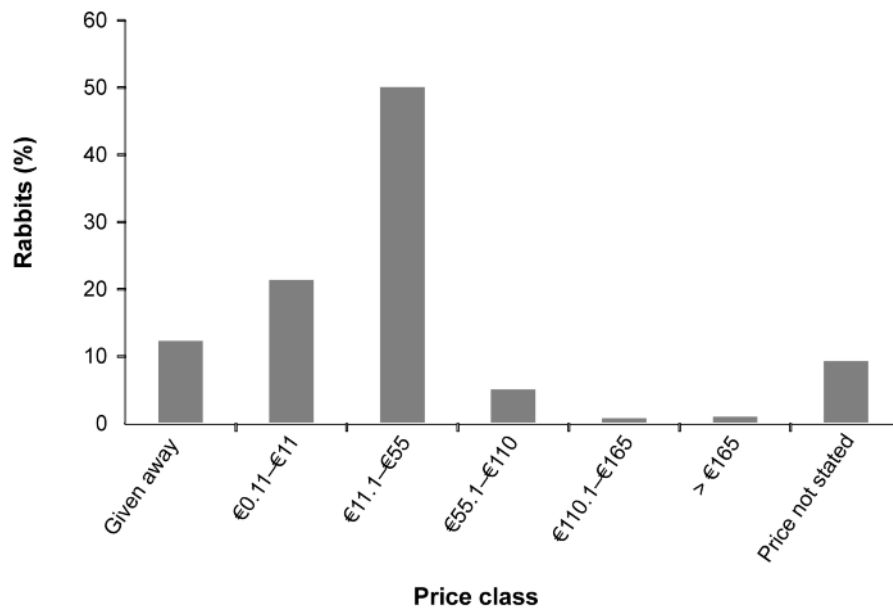
Extent of and reasons for rehoming rabbits

There were 505 rabbits for sale through 334 adverts in Sweden during the study period (December 2012 to February 2013). Out of the 334 adverts, 189 (56.6%) did not specify a reason for putting the rabbits up for sale. The most commonly stated reason for putting rabbits up for sale was 'lack of time' (35.8%) (Table 1).

Other common reasons were 'owners are moving' (16.6%), 'allergies' (13.2%) and 'lost interest' (12.6%). Only 0.9% of the rabbits were put up for sale due to behavioural problems. Behavioural problems were mentioned for a total of three rabbits and the problems mentioned were aggression, unpredictability and inappropriate elimination (house soiling).

Eight rabbits were put up for sale due to 'other owner-related reasons' which are not included in Table 1, but which included: 'the owner being sick'; 'the owner renovating the house'; 'personal reasons'; 'the rabbit not answering expectations in jumping competitions'; 'the owner has bought a cat' and 'the owner only took the rabbit in on a temporary basis'.

Figure 1



Percent of rabbits that were put up for sale within each price class during the three-month study period (December 2012 to February 2013) in Sweden.

Age, price and gender

The mean age of the rabbits in the adverts during this three-month period was 17.6 months (range three months to 7.5 years). Half of the rabbits in the adverts were put up for sale at a price of between €11.1 and €55 (Figure 1). Rabbits were given away for free in 12.3% of cases and 1% of the rabbits were put up for sale for more than €165. It should be noted that 37% of the rabbits were sold with a cage and/or other accessories included in the price.

Slightly more males (45.9%) than females (40.8%) were put up for sale during the whole three-month study period.

Requests regarding the new home or owner

Requests regarding the new home were given in 46.8% of the adverts (total number of adverts was 344), whereas only 39.1% of adverts where rabbits were given away mentioned any requests. Most of the comments referred to the type of home or owner that the advertiser wanted for their rabbit (61.9%) (Table 2). The second most commonly mentioned factor was the rabbit's needs (20%). The needs most often referred to were social needs, exercise and physical needs. Physical needs involved grooming, nail-trimming and feeding. A sufficient amount of time spent by the owner with the rabbit each day was mentioned in 17.2% of the adverts.

Discussion

Extent of and reasons for rehoming rabbits

The aim of this study was to provide a picture as to why rabbit owners choose to rehome their pets and the extent to which Swedish rabbit owners choose to do this. During the three-month study period, 505 rabbits were put up for rehoming on Blocket. Assuming that a similar amount of

Table 2 Comments about the new home were given by the advertiser in 161 out of the 344 adverts (46.8%) over the three-month period (December 2012 to February 2013). The percentages are calculated from all the adverts where comments about the new home were given. Some adverts had comments that fitted into more than one category and were therefore assigned to several categories. The number of adverts in which a comment was stated that fell into each category is indicated in brackets.

Comments concerning...	Percent of comments
Description of the new home or the new owner	61.9% (133)
The needs of the rabbit	20.0% (43)
Time dedicated to the rabbit	17.2% (37)
Having to be sold quickly	0.9% (2)

rabbits are put up for rehoming during the remaining months of the year it can be estimated that approximately 2,020 rabbits are put up for sale through Blocket each year in Sweden (excluding rabbits sold directly from a breeder). When using the figures from SCB (2012) stating that there are 124,611 (\pm 45,081) rabbits kept as companion animals in Sweden, it can be estimated that between 1.2 and 2.5% of the rabbits in Sweden are rehomed through Blocket each year (again excluding rabbits sold directly from a breeder). These figures are only an estimate of the problem with unwanted rabbits in Sweden and no definitive conclusions can be drawn, but it raises questions as to the true extent of the need to find new homes for rabbits, as finding homes might be problematic. The advertisement site used for data collection

in this study refers to itself as the largest advertisement site in Sweden (Blocket 2013b), and has 4 million (exclusive visitors every week). However, it is just one of many alternatives that can be used to find a new home for pets. It has also been shown that pet owners often find it difficult to decide to rehome their pet and that people often postpone the decision for as long as possible (DiGiacomo *et al* 1998). These rabbits may be at risk of suffering reduced welfare, since the owners of these rabbits are less likely to spend time with their rabbits or attend to the rabbits' needs.

Owners of companion animals who no longer feel capable of keeping their pet can help the animal to better circumstances by rehoming it. Moving to a new home may also however be a stressful process for the animal and it is therefore important that animals are not passed from home-to-home indefinitely. People in society today have a tendency to move far more than was previously the case and New *et al* (1999) found that people belonging to more mobile age groups were over-represented among people who chose to rehome their pets through animal shelters, but they also stated the greater likelihood of people in such age groups owning pets.

The reasons stated for relinquishing rabbits in this study are similar to those found in other studies (Ledger 2010; Cook & McCobb 2012) and some of them are selected and discussed further below. The most commonly stated reason for putting rabbits up for sale in this study was 'lack of time' and at the same time the mean age of the rabbits at the time when they were put up for sale was only 17.6 months. This indicates that many rabbit owners fail to estimate the time and effort required to care for rabbits prior to acquiring them as pets. Rabbits are a long-term commitment as, when they are well cared for, they have an average lifespan of 8–12 years (Lowe 2010).

The second most commonly stated reason for putting rabbits up for sale in this study was that owners were moving. This, again, in relation to the low age of rabbits in this study, may indicate that the owners did not plan ahead when they first acquired their pet. It has, however, also been shown that the initial reason given for rehoming a pet is not always the primary reason (DiGiacomo *et al* 1998). It was found when DiGiacomo *et al* (1998) interviewed owners that the owners often had several reasons for rehoming their pet. According to New *et al* (1999) many of the cats and dogs that were given up to shelters because the owners were moving also had exhibited problem behaviours, such as hyperactivity, fearfulness and being noisy in the month before they were handed over to the shelter. These behaviours are likely to have influenced the owners' decision to attempt to rehome their animals. Many of the respondents in the study also believed that their pets misbehaved in order to annoy their owners (New *et al* 1999), which may have led to owners erroneously becoming ill-disposed towards the animals.

Only 0.9% of the rabbits in this study were rehomed due to behavioural problems and the problems mentioned in the adverts were aggression, unpredictability and house soiling. According to a study by Normando and Gelli (2011), the most common complaint from rabbit owners regarding their

pet's behaviour was house soiling followed by destructiveness and not being social enough towards the owner. The fact that the number of rabbits said to have behavioural problems was so low in the present study may be because the owners were more reluctant to mention problems related to their pets when their goal was to sell them, since this may decrease the likelihood of said animal being sold. For this reason we are not confident that the results found in this study regarding the occurrence of behavioural problems is reliable, but there are several other studies which have addressed the issue (Ledger 2010; Edbom 2011; Normandi & Gelli 2011; Cook & McCobb 2012).

In 56.6% of the adverts the advertisers did not specify a reason for putting the rabbits up for sale at all, which may also be indicative of not wanting to decrease the chances of the rabbit being sold.

Age, price and gender

The present study also aimed to provide some insight into the age, price and gender of the rabbits that are put up for sale in Sweden and what requests rabbit owners put on their rabbits' new home. In a study by Mullan and Main (2006) on pet rabbits in the UK, the mean age of the rabbits was 2.2 years. The low age at which many of the rabbits in the present study were rehomed by their owners (mean age at time of the adverts being put up being approximately 1.5 years [17.6 months]) is in agreement with another study by Mullan and Main (2007) which showed that newly acquired rabbits were more frequently handled by their owners. New *et al* (1999) also found that most of the cats and dogs relinquished to shelters in their study had been acquired by their owner less than two years previously. This suggests that the owner's interest in the animal decreases very quickly which may contribute to the rabbits in the present study being rehomed at an early age.

Half of the rabbits in this study were put up for sale for a price of between €11.1 and €55, while 12.3% of rabbits were given away for free. Putting a price on a rabbit may help to sort out unreliable buyers and, at the same time, put a value to the rabbit and thus help increase its status as a companion animal species in our society.

Many of the rabbits in this study were sold with a cage and/or other accessories included in the price, which provokes the question of whether the advertiser actually wanted payment for the rabbits themselves or whether it was only the cage and/or accessories that cost money. The answer would help to shed light on how rabbits are viewed and valued as pets in Sweden today. New *et al* (1999) found that the owners of most of the cats and dogs that, in their study, had been relinquished by their owners to a shelter had paid no cost for the animal when first acquiring it. This may indicate that owners who obtain their pet for free are less motivated to put time and effort into making the relationship with their pet work and may be at greater risk of relinquishing their pet after a shorter period of time. However, Weiss and Gramann (2009) are not in agreement with these findings. Instead, they showed that within the first few months, cats will be exposed to the same quality of care.

In the study by New *et al* (1999) more female cats than male (59.8 and 40.2%, respectively) were relinquished to shelters in the USA and the same applied to dogs (54.7% females and 45.3% males). In our study, the male/female percentages were 45.9 and 40.8%, suggesting that owners did not have a gender preference.

Requests on the new home or owner

A responsible seller will always try to find a suitable and responsible new owner and also follow up on how the animal is doing in its new home, as selling or rehoming an animal comes with the responsibility of giving the animal a good future life.

Requests on the new home were given in 46.8% of the adverts in the present study, which means that over half of the adverts did not state any preferences regarding their rabbit's new home. Most comments (61.9%) contained requests regarding the new home or the new owner and 20% of comments were about the rabbit's needs. The most commonly stated needs (in decreasing order of magnitude) were social, exercise and then physical. This indicates that at least some of the advertisers had knowledge about the rabbit being a social animal and that exercise is required in order to promote good health. It is not possible, however, based on this study, to say anything in general about the knowledge of Swedish rabbit owners regarding the needs of rabbits.

Data collection and design of the study

The collection of data for this study was made continuously but not daily. This may have resulted in a number of adverts being lost due to deletion by the advertiser prior to recording, ie if the rabbit was sold quickly. There were also adverts that seemed to be re-posted if the rabbit was not sold, but due to the recording method it was not possible to sort these out. These recording-related factors may both have affected the results, but will probably have done so in opposing ways. The method of collecting data may have underestimated the number of rabbits that were put up for sale during the three-month period, while the fact that some adverts were put up more than once may have overestimated the number of rabbits put up for sale. If a similar study is to be conducted in future, data collection should occur daily in order to get an even more accurate number of adverts and the recording method should be adjusted in order to identify adverts that are put up more than once. This could be done in an easy way by noting the name of the advertiser beside each advert on the data collection sheet.

Animal welfare implications and conclusion

Returning to the aim of this study, it can be said that it helped to provide a picture of the situation regarding the rehoming of rabbits in Sweden. Reasons such as 'lack of time' and 'owners are moving' were commonly used with reference to rehoming rabbits in this study. Furthermore, the

mean age of the rabbits in this study at the time of relinquishment was low. The major finding from this study is that rabbits are put up for sale and rehomed in Sweden. Further, rabbit owners in this study putting up animals for sale, have unreasonable expectations of the amount of time and care that their rabbits will require.

The welfare implications that should be addressed concern stress effects on rabbits having to change environment and owners. This study can also be used as a starting point for future research about rabbits kept as companion animals in Sweden in order to gain a wider understanding of the extent to which rabbits are rehomed and the reasons people choose to rehome their pet rabbits. Elucidating a better understanding of this makes it possible to take appropriate actions to decrease and prevent the problem of unwanted rabbits and thereby improve the welfare of pet rabbits in Sweden.

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