



H.A.R.E.

Houserabbit Adoption, Rescue and Education, Inc.

Why Spay or Neuter my rabbit? Some Scary Numbers...

by Dana Krempels, Ph.D.

If you are contemplating getting a bunny "for Easter" or for any other reason, it's imperative to spay or neuter your companion for his or her health and longevity. But aside from the individual rabbit's wellbeing, another factor to consider is just how quickly these prey animals can reproduce, if left to their own devices. More than one rescuer in the U.S. has been faced with the daunting task of trying to find homes for a "backyard breeding" operation gone amuck.

Most of us are familiar with the estimate that one cat and her offspring can potentially bear more than 40,000 cats in seven years. But this impressive number pales in comparison to what a rabbit can produce! Here are those numbers, for sharing and scaring.

A single female rabbit can have 1-14 babies per litter, but let's be conservative and say that the average litter size is six. We'll also make the assumption (remember, this is all hypothetical) that only half of those are females, and we will calculate the potential fecundity of our bunny population only from these hypothetical three females per litter, since females are the limiting factor in a population when it comes to making babies. We're also assuming no mortality, since we're talking about potential reproduction with no set environmental carrying capacity.

Rabbit gestation is 28-31 days, and because they are induced ovulators, mother rabbits can become pregnant again within hours of giving birth to a litter. This means that mama could, hypothetically, have one litter per month if she is constantly with a male rabbit. (Poor mama!)

If our "starter bunny" begins reproducing at age of six months (not an unreasonable estimate), and has babies for seven years (which she probably won't, since she'd burn out in 2-3 years if she's having that many babies, but it's not impossible), then by the end of the first year:

One mother rabbit x 3 female babies x 12 months = 36 female babies (plus your original mama makes 37) I'll add the new babies to the reproductive population at the beginning of the following year. At that point, their average age would be six months--the time of their first litter. (Not perfect, perhaps, but it works if you average the new females' reproductive output.) If--starting at the beginning of Year Two --each of the Year One female rabbits produces an average of 3 female offspring per month, then by the

* **End of Year Two:**

37 mother rabbits x 3 female babies x 12 months = 1332 female babies
(plus your original 37 will equal a total of **1369 total**)

* **End of Year Three:**

1369 mother rabbits x 3 female babies x 12 months = 49,284 female babies
(49,284 + last year's 1369 = **50,653 total**)



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* **End of Year Four:**

$50,653 \times 3 \times 12 \text{ months} = 1,823,508 \text{ female babies}$
($1,823,508 + \text{last year's } 49,284 = \mathbf{1,872,792 \text{ total}}$)

* **End of Year Five:**

$1,823,508 \times 3 \times 12 \text{ months} = 67,420,512$
($67,420,412 + \text{last year's } 1,872,792 = \mathbf{69,293,304 \text{ total}}$)

* **End of Year Six:**

$69,293,304 \times 3 \times 12 \text{ months} = 2,494,558,944$
($2,494,558,944 + \text{last year's } 69,293,304 = \mathbf{2,563,852,248 \text{ total}}$)

* **End of Year Seven:**

$2,563,853,248 \times 3 \times 12 = 92,298,716,930$
($92,298,716,930 + \text{last year's } 2,563,852,248 = \mathbf{94,862,569,180!!}$)

That's nearly 95 *billion* rabbits in seven years! You can see why people use the phrase "reproducing like rabbits."

Since unspayed rabbits generally have a shorter lifespan than unspayed cats, it might be unrealistic to expect a female to live a full seven years if she's reproducing at that rate. Even so, the offspring of that initial female, reproduction left unchecked, are quite capable of bringing that number into the millions in only a few years. (Darwin was right!)

Do the bunnies of the world a favor: have your companion rabbit spayed or neutered!

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