Raising Rabbits to Survive

SECOND EDITION

Everything you need to know so you can start breeding rabbits for meat and fur today!
Top 10 Reasons to Raise Rabbits

1. **Female rabbits multiply like crazy!**
   One healthy, mature doe can produce up to 1000% of her body weight every year.

2. **Rabbits don’t take up much space.**
   Whether you’re living in a condo or out in the country, you can find space to raise them. Try that with chickens. Plus they’re usually not considered livestock so you can keep them when other animals would be out of the question. Do make sure about local zoning codes, though, if you want to save yourself some unneeded hassles.

3. **Rabbits are low maintenance.**
   Check in on them every evening to feed and water, clean their cages once a month and keep a simple breeding journal. Does (females) take care of the young and hardly anything special is needed from you. No incubators, brooders or hand-raising.

4. **A little rabbit feed goes a long way.**
   When bunnies are being weaned (6-8 weeks old), they are large enough for consumption. Only the adults and replacements will be fed since the bunnies are butchered before you start feeding them.

5. **Rabbits are very quiet.**
   You don’t have to worry about them giving away your location if you’re trying to stay off the radar. Who knows what a chicken, goose or duck is likely to attract, not to mention a rooster. If the cages are well hidden and clean, neighbors may not even know they are there.

6. **Rabbits are meal-sized.**
   Because rabbits are compact and often butchered at “fryer size” (3-5 pounds), you don’t have to worry about leftovers.

7. **Rabbit manure will make your garden love you.**
   If you vermicompost, your worms will love you too.

8. **Rabbit meat is very high in protein and extremely low in fat and cholesterol.**
   Doctors have actually been known to prescribe rabbit meat diets. Don’t try to live off it alone, though. You need lots of carbs along with it for a healthy diet.

9. **Rabbit fur will make an incredibly warm coat and is a great bartering item.**

10. **Rabbits are relatively easy to butcher and clean.**
   No one likes doing it, but it is part of the process. Someone with experience can take a rabbit from cage to freezer in 5 minutes or less. No feathers to pluck or clean up.
# Table of Contents

Top 10 Reasons to Raise Rabbits ................................................................. 2  
Introduction to Raising Rabbits ................................................................. 6  
   About Domestic Rabbits ...................................................................... 6  
Raising Rabbits to Sustain a Family of Four ............................................. 7  
Costs of Getting Started ....................................................................... 8  
Housing & Other Equipment .................................................................. 9  
   Cages .................................................................................................. 10  
   Cleaning Cages .................................................................................. 11  
   Outside Hutches ............................................................................... 12  
   Feeders .............................................................................................. 12  
   Water bottles or watering system ...................................................... 13  
   Nesting boxes .................................................................................. 13  
   Keeping the Nest Clean ................................................................... 15  
   The hutch card or journal lists ........................................................... 15  
   Feed storage container .................................................................... 16  
   Other Equipment ............................................................................. 16  
Breeds, Blood Lines and Buying .............................................................. 19  
   Buying Rabbits ................................................................................ 20  
   How many rabbits to get and what age? ........................................... 20  
   Where to buy rabbits ....................................................................... 20  
19 Commercial Rabbit Breed Suitable for Meat & Fur Production .......... 23  
   Altex ............................................................................................... 23  
   American Blue & White (German Blue Vienna) ................................ 23  
   American Chinchilla ....................................................................... 24  
   American Sable ............................................................................. 24  
   Beveren ........................................................................................... 25  
   Cinnamon ....................................................................................... 27  
   Florida White .................................................................................. 27  
   Harlequin ......................................................................................... 28  
   Hotot or Blanc d’Hotot ................................................................... 29  
   New Zealand ................................................................................... 29  
   Rex ................................................................................................. 30
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satin</td>
<td>31</td>
</tr>
<tr>
<td>Silver Fox</td>
<td>31</td>
</tr>
<tr>
<td>Silver Marten</td>
<td>32</td>
</tr>
<tr>
<td>Health, Nutrition &amp; Feeding</td>
<td>33</td>
</tr>
<tr>
<td>A Few Basics on Rabbit Health</td>
<td>33</td>
</tr>
<tr>
<td>Common Problems - Symptoms, Treatment &amp; Prevention</td>
<td>33</td>
</tr>
<tr>
<td>Coccidiosis, Intestinal</td>
<td>34</td>
</tr>
<tr>
<td>Conjunctivitis (Weep Eye)</td>
<td>34</td>
</tr>
<tr>
<td>Ear mites</td>
<td>35</td>
</tr>
<tr>
<td>Enteritis Complex (Bloat, Scours)</td>
<td>35</td>
</tr>
<tr>
<td>Hairballs</td>
<td>36</td>
</tr>
<tr>
<td>Heat stroke</td>
<td>36</td>
</tr>
<tr>
<td>Malocclusion</td>
<td>37</td>
</tr>
<tr>
<td>Caked Mammary Glands</td>
<td>37</td>
</tr>
<tr>
<td>Mastitis (Blue Breast)</td>
<td>38</td>
</tr>
<tr>
<td>Pasteurellosis (Snuffles, Cold)</td>
<td>38</td>
</tr>
<tr>
<td>Sore Hocks (Ulcerative Pododermatitis)</td>
<td>39</td>
</tr>
<tr>
<td>Feeding</td>
<td>40</td>
</tr>
<tr>
<td>Feeding Pellets</td>
<td>40</td>
</tr>
<tr>
<td>How Much to Feed</td>
<td>43</td>
</tr>
<tr>
<td>Producing Your Own Feed – Is It A Viable Option?</td>
<td>44</td>
</tr>
<tr>
<td>Mating &amp; Reproduction</td>
<td>49</td>
</tr>
<tr>
<td>Mating Basics</td>
<td>49</td>
</tr>
<tr>
<td>How to Mate Rabbits</td>
<td>50</td>
</tr>
<tr>
<td>Cyclic Breeding System</td>
<td>51</td>
</tr>
<tr>
<td>Gestation and Kindling</td>
<td>52</td>
</tr>
<tr>
<td>Is She Pregnant? Palpating a Doe</td>
<td>52</td>
</tr>
<tr>
<td>Getting Ready to Give Birth</td>
<td>52</td>
</tr>
<tr>
<td>You’ve Got Bunnies – Now What?</td>
<td>53</td>
</tr>
<tr>
<td>Rebreeding &amp; Weaning</td>
<td>54</td>
</tr>
<tr>
<td>Selecting Replacements &amp; Fryers</td>
<td>55</td>
</tr>
<tr>
<td>How to Select Replacement Breeding Stock</td>
<td>55</td>
</tr>
<tr>
<td>Culling Undesirables from the Herd</td>
<td>56</td>
</tr>
<tr>
<td>Reproduction Problems</td>
<td>57</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Culling, Dressing and Preparing</td>
<td>59</td>
</tr>
<tr>
<td>Dispatching the Rabbit</td>
<td>59</td>
</tr>
<tr>
<td>Dressing the carcass for meat</td>
<td>61</td>
</tr>
<tr>
<td>Portioning the Meat</td>
<td>62</td>
</tr>
<tr>
<td>Curing the Skins</td>
<td>62</td>
</tr>
<tr>
<td>Tanning the Pelt</td>
<td>63</td>
</tr>
<tr>
<td>Tanning by the Salt-Alum Process</td>
<td>63</td>
</tr>
<tr>
<td>Resources</td>
<td>64</td>
</tr>
<tr>
<td>Rabbit Housing Plans</td>
<td>64</td>
</tr>
<tr>
<td>Rabbit Cages</td>
<td>64</td>
</tr>
<tr>
<td>Rabbit Houses</td>
<td>64</td>
</tr>
<tr>
<td>Commercial-Scale Rabbitries</td>
<td>64</td>
</tr>
<tr>
<td>Rabbit Hutches</td>
<td>64</td>
</tr>
<tr>
<td>Forums</td>
<td>65</td>
</tr>
<tr>
<td>National Rabbit Breeder Associations</td>
<td>66</td>
</tr>
<tr>
<td>US State Rabbit Breeder Associations</td>
<td>66</td>
</tr>
<tr>
<td>UK Area Rabbit Breeder Associations</td>
<td>66</td>
</tr>
<tr>
<td>New Zealand Breed Associations</td>
<td>67</td>
</tr>
<tr>
<td>Breed Specific Associations</td>
<td>68</td>
</tr>
<tr>
<td>Equipment &amp; Supplies</td>
<td>71</td>
</tr>
<tr>
<td>Feed Supplies</td>
<td>72</td>
</tr>
<tr>
<td>Magazines</td>
<td>72</td>
</tr>
<tr>
<td>Acceptable Foods for Rabbits -- SAFE Vegetables, Herbs &amp; Grains</td>
<td>73</td>
</tr>
<tr>
<td>Toxic Foods for Rabbits</td>
<td>76</td>
</tr>
</tbody>
</table>
Introduction to Raising Rabbits

We are all aware of the current problems in world food chains, causing outbreaks of disease and constantly stealing hard earned money from your pocket for sub-par food. Wouldn’t you like to be able to know exactly what you are eating? To know everything about the animals you consume such as their diet and living accommodations? To control whether it is a truly organic being or if chemical supplements are given? Would you like to provide your family with warm clothing as well as put food on the table? Would you like to have meat, fur, rabbits and more to sell, trade or barter?

All that and more is possible if you begin raising your own rabbits for meat. Rabbits are quiet, clean and docile creatures which can even be raised in your home.

People have been raising rabbits for centuries but breeding rabbits for meat and fur production didn’t become popular in the United States until the beginning of the 20th century. During the Great Depression, many families began raising rabbits for food to avoid starvation and provide a significant source of protein. With only table scraps and foraged greens, a family could still have decent production numbers although the rabbits were not at their ultimate protein levels. Peak rabbit production rates in 1944 are estimated at about 24 million rabbits. In times of national emergency, production of rabbits traditionally increases.

The US Agricultural Department expected food prices to rise 3.5-4.5% in 2009, versus an increase of 5-6% in 2008. The average price of beef has increased almost 44% since 1996. The price for a pound of chicken has increased 300% since 1998. Do you want to keep giving your money to big business or would you rather keep it at home where it belongs?

About Domestic Rabbits

The phrase "domestic rabbit" is often used to refer to tame rabbits which are housed in cages, pens, or other enclosures. Due to the “domesticated” ways in which they are raised, they are distinguished from hares and wild rabbits which exist in their natural or wild state. All breeds and varieties of domestic rabbits were developed from the European rabbit (Oxyctolagus cuniculus). In some areas, European rabbits exist in the wild state, so the term "domestic rabbit" is used to classify those maintained in close relation to man. The domestic rabbit is not native to the United States.

Rabbits and hares inhabit most of the temperate regions of the world. Rabbits were once believed to be related to rodents because of their similar chisel-like teeth which continue to grow if not regularly worn down by chewing. Rabbits, however, have two upper and two lower incisor teeth and two smaller pulp teeth behind the upper incisors—a total of six teeth. Rodents only have four.

Breeds of modern domestic rabbits have developed since the 18th century. There are now several hundred varieties throughout the world, varying in size, color, type of hair coat, and other characteristics. There are currently 45 breeds which are recognized by the American Rabbit Breeders Association.
Raising Rabbits to Survive – 2nd Edition

Raising Rabbits to Sustain a Family of Four

In order to get started, you really only need about 4 rabbits (2 does and 2 bucks). Those few rabbits will produce enough offspring to sustain a family of four with fresh meat one to two times a week. It all depends on how large your typical litter size is and how many does you breed total.

Does which come from a breeding line accustomed to breeding often could be bred every five weeks but really shouldn’t be bred more often than that if you want to maintain the quality of your litters. Dates are approximate since does may carry only 28 days or a breeding may be “missed” causing the need for rebreeding, and thus a delay in the cycle.

Does will also slow production in the winter or perhaps not wish to produce at all. That’s why you must carefully choose breeding stock if you live in a colder climate. Does born in the winter should also produce well in the winter. If you rabbits only produce during the summer you should consider replacing them. In addition, once a breeding schedule is established it should be carefully followed. If breeding frequency is decreased or is ceased for a time, it can be very difficult to return to the previous higher level.

Sample Breeding Schedule (1 doe with 5 cycles, 1 every 6 weeks, yielding 30-50 rabbits)

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
<th>Month</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1</td>
<td>Breed Doe</td>
<td>August 15</td>
<td>Rebreed doe</td>
</tr>
<tr>
<td>February 1</td>
<td>6-10 kits born</td>
<td>September 15</td>
<td>6-10 kits born</td>
</tr>
<tr>
<td>March 15</td>
<td>Rebreed doe</td>
<td>November 1</td>
<td>Rebreed doe</td>
</tr>
<tr>
<td>April 15</td>
<td>6-10 kits born</td>
<td>December 1</td>
<td>6-10 kits born</td>
</tr>
<tr>
<td>June 1</td>
<td>Rebreed doe</td>
<td>January 15</td>
<td>Rebreed doe</td>
</tr>
<tr>
<td>July 1</td>
<td>6-10 kits born</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sample Breeding Schedule (1 doe with 4 cycles, 1 every 8 weeks, yielding 24-40 rabbits)

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
<th>Month</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1</td>
<td>Breed Doe</td>
<td>August 1</td>
<td>6-10 kits born</td>
</tr>
<tr>
<td>February 1</td>
<td>6-10 kits born</td>
<td>October 1</td>
<td>Rebreed doe</td>
</tr>
<tr>
<td>April 1</td>
<td>Rebreed doe</td>
<td>November 1</td>
<td>6-10 kits born</td>
</tr>
<tr>
<td>May 1</td>
<td>6-10 kits born</td>
<td>January 1</td>
<td>Restart cycle</td>
</tr>
<tr>
<td>July 1</td>
<td>Rebreed doe</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

www.RaisingRabbitsForMeat.com
Costs of Getting Started

Raising rabbits to survive is not hard to do, but there are some costs involved with basic setup. Not only do you need to buy quality breeding rabbits but you’ll also need cages for each rabbit and extras for each litter as it grows, feeders, water bottles, nesting boxes, feed, bedding, basic meds and other supplies.

If you’ve raised small animals before, you may have spare equipment lying around. You could also find items at flea markets or garage sales but make sure you scrub and sterilize used equipment before letting your own rabbits into contact with it. If you’re handy, you can also build your own equipment at a much lower cost than buying new. Look for this symbol ✎ below to identify items you can build or grow yourself.

The list below is just a sample of start up costs you may incur using basic equipment. Pricing of other options like stackable cages is below. The setup cost will ultimately come down to your preferences and your budget restrictions.

**Rabbitry Start-up Costs with Two Bucks & Two Does (based on January 2010 prices)**

<table>
<thead>
<tr>
<th>Qty</th>
<th>Description</th>
<th>Each</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>junior meat breeder quality rabbits w/ pedigrees</td>
<td>$35</td>
<td>$140</td>
</tr>
<tr>
<td>2</td>
<td>12 oz. metal feeder with screen bottom and lid (for bucks)</td>
<td>$6</td>
<td>$12</td>
</tr>
<tr>
<td>6</td>
<td>20 oz. metal feeder with screen bottom and lid (does &amp; fryers)</td>
<td>$7</td>
<td>$42</td>
</tr>
<tr>
<td>7</td>
<td>all-weather water bottles (32 oz.) ✎</td>
<td>$6</td>
<td>$42</td>
</tr>
<tr>
<td>1</td>
<td>bottle brush</td>
<td>$5</td>
<td>$5</td>
</tr>
<tr>
<td>1</td>
<td>tattoo registrar clamp (for record keeping)</td>
<td>$60</td>
<td>$60</td>
</tr>
<tr>
<td>4</td>
<td>doe/fryer cages ✎</td>
<td>$28</td>
<td>$112</td>
</tr>
<tr>
<td>5</td>
<td>nest boxes (extra nest box for changing litter is growing) ✎</td>
<td>$18</td>
<td>$90</td>
</tr>
<tr>
<td>2</td>
<td>buck cage ✎</td>
<td>$28</td>
<td>$56</td>
</tr>
<tr>
<td>3</td>
<td>galvanized metal collection trays for under cages</td>
<td>$20</td>
<td>$60</td>
</tr>
<tr>
<td>2</td>
<td>50 pound of bags bedding ✎</td>
<td>$18</td>
<td>$36</td>
</tr>
<tr>
<td>4</td>
<td>4 pound bags of pelleted feed ✎</td>
<td>$8</td>
<td>$32</td>
</tr>
<tr>
<td>1</td>
<td>bag crimped oats ✎</td>
<td>$8</td>
<td>$8</td>
</tr>
<tr>
<td>1</td>
<td>1/2 pound Acid-Pak 4-Way (electrolytes &amp; probiotic supplement)</td>
<td>$8</td>
<td>$8</td>
</tr>
<tr>
<td>1</td>
<td>6.4 oz pkg. Terramycin powder (antibiotic)*</td>
<td>$8</td>
<td>$8</td>
</tr>
<tr>
<td>1</td>
<td>16 oz pkg. Corid (coccidiosis prevention/treatment)*</td>
<td>$20</td>
<td>$20</td>
</tr>
<tr>
<td>1</td>
<td>grooming brush</td>
<td>$9</td>
<td>$9</td>
</tr>
</tbody>
</table>

Total needed to get started $740

**Other options**

<table>
<thead>
<tr>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stackable doe/fryer cages</td>
<td>$62</td>
</tr>
<tr>
<td>Stackable buck cages</td>
<td>$65</td>
</tr>
<tr>
<td>Outdoor hutche</td>
<td>$120</td>
</tr>
</tbody>
</table>
Housing & Other Equipment

Several things are essential for your rabbit housing, regardless of where it is located, what it is made from or what it looks like.

Rabbits are prey to many other animals (dogs, coyotes, etc) so they need to be protected and secure. They are also easily frightened by loud noises and threatening sounds. Rabbit cages should be off the ground and the ideal housing will hang from the ceiling or wall so that snakes, rats and other rodents cannot climb the hutch legs and gnaw off little bunny toes and legs through the mesh. Cages should also be sturdy so predators cannot easily get doors open (should they manage to reach them) and so rabbits can’t free themselves.

Rabbits also need to be protected from the weather and their housing should remain dry and clean. Heat is a greater concern than the cold so your rabbitry area should be well ventilated in the warmer weather and shaded; but easily closed up and kept draft free during the winter. Housing with solid sides and a wire bottom leave rabbits most susceptible to up-drafts and should be avoided if possible.

Temperatures of at least 40°F and not more than 90°F should be maintained. The ideal growing temperature for rabbits is 60°F (15.6°C) and 60% relative humidity. Maintaining this humidity level is often impossible in many climates so one should mostly focus on keeping rabbits from overheating in the summer. Barely any heating should be required in the winter, and if any supplementary heat is used at all, it should be restricted to nest box heaters (under the floor of the nest), keeping nest temperature to about 80°F (27°C) all year long.

Overhead cover is also essential. For these reasons, many people may choose to keep their rabbits in a garage, covered patio, old hen house or barn where they are already fairly well protected from the elements. Earth or concrete floors are the most favorable. Any sort of wood flooring is not a good idea because it will absorb urine and spilled water, ultimately causing odor problems and rotten wood. If you smell ammonia fumes or see moisture condensing on rabbitry walls and windows, you must increase the ventilation rate. Use fans to create air flow but do not allow drafts.

In many parts of the world, rabbits are raised in a bedroom or other spare room in the family apartment or house. Waste parts of vegetables are recycled into excellent fertilizer for the family garden and the rabbits providing the family with a supply of healthy, fresh meat. For indoor rabbit raising, a sheet of high-grade plastic sheeting laid over a sloping wood shelf can drain the waste water into a bucket. A shallow slope lets the liquids run off while the manure pellets remain to be swept off into another bucket. In any housing situation, it is important to keep the floor as dry as possible so that manure stays dry. Waste water can be caught in gutters or buckets which should be emptied daily. If you collect rabbit urine, use it sparingly – it will burn plants.

Fifteen does, two bucks, and their litters will produce approximately one ton of manure a year. Rabbit manure is drier than poultry manure. Rabbit manure analysis varies but is approximately 1.3% N, .9% P, 1.0% K. Keeping earthworms below cages and hutches with wire bottoms reduces odor and fly problems and creates an opportunity to produce fantastic fertilizer for your own use or sale. Vermicomposting does require a small amount of extra time and attention from you.

www.RaisingRabbitsForMeat.com
(feeding the worms, keeping the compost moist, harvesting worms or compost) but it’s a minimal time investment given the rewards. This type of arrangement works best in open rabbitries and moderate climates. Worm beds need to be kept moist and rabbits prefer low humidity so enclosed rabbitries or those in cold climates may have more problems. Instead, keep the worms outside the rabbitry but nearby so you can dump the manure into the worm bins conveniently and quickly. Both rabbit manure and worm compost are mild fertilizers that will not burn plants if overfed. In fact, the plants just take the nutrients they need and the rest just goes into the dirt.

If rabbit manure is kept dry, there is little fly breeding. Good drainage under the cages and good ventilation keep manure dry. Leaking waterers usually create most of the problems. Proper pressure adjustment and replacement of defective values help prevent the problem. In spite of all you do, manure occasionally gets moist enough to attract fly breeding.

If you find yourself with drastic fly problems, here are additional fly control methods:

1. Sprinkle agricultural lime generously over the manure to absorb moisture. Apply twice weekly or more frequently if needed.
2. If you are finding mostly adult flies, it is possible that they are breeding in the manure. Stir the manure and you should find maggots. Manure can be sprayed with larvicides but only those which are approved for poultry cage houses. Follow the label directions and make sure the house is well ventilated when you spray.
3. Use fly baits on walks. Spray grass areas outside the house.
4. Proper manure management is the safest, most economical, and effective way to control flies.

Cages

Cages should be constructed of one-inch, 12-guage galvanized-after-welding mesh or “hardware cloth.” Poultry mesh is not suitable for cages because the rabbits may chew on it, injuring their teeth. They may also find ways to pry underneath it with their nose, freeing themselves. The bottom of the cage should be 16-guage to support the weight of the rabbit.

Suspend cages from the ceiling or rafters with 14-gauge wire or mount them on the wall. If this is not possible, use metal legs to support the cages. Remember, if rats, snakes and other small predators are of concern, don’t use wooden posts or benches.

There is also the concern of odors seeping into the wood which will just be one more thing you have to scrub. A two-tier high cage setup will allow you to maximize space but more than that could create management problems.

Minimum Suggested Cage Sizes

<table>
<thead>
<tr>
<th>Breed</th>
<th>Minimum Suggested Cage Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Giant breeds (&gt;12 pounds)</td>
<td>30 x 36 in. to 36 x 48 in.</td>
</tr>
<tr>
<td>Medium breeds (7-12 pounds)</td>
<td>24 x 30 in. to 30 x 36 in.</td>
</tr>
<tr>
<td>Smaller breeds</td>
<td>18 x 24 in.</td>
</tr>
</tbody>
</table>

www.RaisingRabbitsForMeat.com
Adult rabbits need individual cages. Having more than one in a cage will result in fights and two does in one cage can induce labor in each other. Kits can be left in with the mother until 8 weeks old if adequate space is provided. Bucks can be housed in slightly smaller cages but will benefit from some extra exercise in a decent sized cage. You will also want an isolation cage for any sick animals or to quarantine rabbits which are being introduced to the herd or have been away from the others for a period of time (such as at a show.) These extra cages will also be useful when you are cleaning the rabbit cages so you have a safe place to temporarily house the rabbits.

**A good rule to follow for cage sizing is one square foot for each pound of rabbit.** Examples:

- Small breeds — 2 1/2 x 2 1/2 ft. = 6 1/4 sq. ft.  
- Medium breeds — 2 1/2 x 3 ft. = 7 1/2 sq. ft.  
- Large breeds — 2 1/2 x 4 ft. = 10 sq. ft. with at least 18 inches of head room. Don’t crowd your doe into a small cage that will be overflowing when 8-10 bunnies join her. The place will fill up fast! Also ensure that you can get your hands on the rabbit wherever it may try to hide in the cage. If it is too deep, the rabbit will run to the far corner out of your reach! Making the cage longer, not wider, will allow you easier access.

Cage capacity also varies with time of year. Young rabbits (under 10 weeks) prefer to be crowded in cold weather. When it is cold, the small nest box of six week old bunnies will be just a box of ears. They prefer cramming into the box to share warmth instead of sitting out on cold wire. In cold weather, a large fryer cage can be filled so that when the rabbits are sitting in normal awake position, the entire floor is covered. A large cage with just a few cold rabbits in it is asking for digestive problems caused by low caecal temperature. However, on a hot day in summer, when the rabbits all spread out on their sides on the floor, 25% of the floor must remain uncovered or the rabbits will overheat.

See the Resources section for plans to build your own wire rabbit cages. You’ll need additional supplies such as [cage clip pliers](#) and [cage clips](#) to complete the job.

Here are is an example of cages you can purchase for large breed rabbits:

**Havahart 4104 Rabbit Hutch 30 x 36 x 18**

**Cleaning Cages**

You will do yourself a favor if you establish some sort of schedule by which you clean your cages. The simplest schedule can be set up around the kindling cycle of the doe: Each time a doe gets a clean nest box, also give her a clean cage! This event is the critical control point in rabbit sanitation. When the doe needs the next nest box, do NOT move her old litter - take the doe AWAY from the old litter, and put her in a clean cage with a clean nest box. Do this EVERY TIME without fail. The old litter of pups stays in that same cage they were born in, until they are shipped out, saved for replacements or put into larger fryer pens. When they are finally removed, then that cage is completely cleaned. This breaks the cycle of contamination in rabbitries. Each cage is treated as the production unit and is cleaned after each "batch."

Do not pressure-wash cages in the rabbit barn or housing. A fine mist of dirty water floats all around as you’re doing it. Instead, take the cage outside in an open space. Use a propane torch to first burn the hair off and then you can clean the cage. Either use a pressure washer or scrub the cages with detergent water and a brush. You may need to soak heavily soiled areas to help...
release the grime. Once everything is cleaned off, spray the cage with a bleach solution to sanitize.

### Outside Hutches

If you don’t have the luxury of an outbuilding for your rabbitry, you will need hutches. But you still need to ensure that the housing is safe, dry and secure for your rabbits.

Hutches can be bought pre-assembled in a store or as a kit that you put together yourself. You can also build them entirely from scratch. Wire is again the preferred choice because it will last longer and is easiest to clean, but wood is often used and quite suitable. Just keep in mind that rabbits may chew on the wood if it’s not protected by wire, and wire over wood creates a trap for droppings. This makes keeping the hutches clean a nightmare. Wooden floored hutches must also be cleaned daily, which may be more time consuming than you’d like. Straw, sawdust and shavings make good bedding, which can be thrown on your compost heap later. You’ll be amazed at what one rabbit contributes to the pile!

### Feeders

Galvanized metal self feeders are available at most feed stores for $6-7 each. A feeder is a metal box which attaches to the outside of the cage with a trough which sticks through a hole cut in your cage. Some hang entirely inside the cage. Get the model with the screened bottom so “fines” (dusty bits of the feed pellets) sift through. They only cost a bit more but will save you from cleaning them out all the time. Rabbits won’t eat the fines and the dust could cause respiratory problems if left in the cage.

You can also use dishes or crocks for food dishes but they get mistaken for a toilet by babies, are sat in by the rabbits and tend to get knocked over easily. Using a feeder will make the process a lot more simple and fast for yourself because it also allows you to feed the rabbits without opening every cage door. Feeders also hold more rabbit feed for times when your rabbits should have plenty of food available, such as when your doe is pregnant or has a litter being weaned.

Each time the cage is cleaned, you should clean the feeder. If you decide to use crocks or bowls, you will need to clean them more often. Take the feeder off the cage, soak it, scrape it clean, and then bake it for 30 minutes at 250 to 300°F in the oven.

---

Although it may look cute or amusing, finding baby rabbits in the food or water bowls will only lead to more work and health problems when they defecate in them. So do yourself a favor and use feeders & water bottles instead of crocks or bowls.
**Water bottles or watering system**

Fresh, clean water is essential for your rabbits and needs to be available at all times. During warm weather, a doe and her kits may drink up to a gallon of water per day. Avoid using any sort of crocks, bowls or open-topped water bottles. As mentioned in the feeder section, rabbits love using bowls and crocks for a port-o-potty and will constantly flip them over. They are also a breeding ground for diseases like liver coccidiosis. If you decide to use a crock, make it a half-gallon stoneware crock that is heavy enough to stay put. Getting one with a sloping sides and a concave bottom will keep it from breaking during freezing temps in the winter. Crocks and bowls should be cleaned daily.

The [hanging water bottle with a dew drop valve](https://www.example.com) is a common and inexpensive solution. If you buy one, spring for the hinge-topped rather than the bottom-filled bottles to save a lot of hassle and time. Remember, bigger is better when it comes to bottle size. Avoid any tips that are not made of stainless steel or which contain a stainless steel centerpiece because rabbits will chew on them and destroy them.

You could also build your own bottle watering system with large jugs (such as a bleach bottle) and the dew drop valves themselves but make bottles small enough that you still need to refill them daily so you keep them cleaner. Build a rack to hold the jug upside down and feed the valve into the cage. Punch a few small holes in the bottom of the jug (which has become the top when it’s upside down) to vent it and keep the water flowing. Using large jugs keeps you from needing to add or change water so often, the rabbits will always have plenty of fresh water and freezing isn’t an issue since the jugs are plastic.

Each rabbit will need his own bottle and they will need to be scrubbed out and disinfected from time to time with bleach or sanitizer.

**Nesting boxes**

A removable nest box filled with hay or straw will be needed in the cage of each pregnant doe about five days before she’s due to kindle (give birth.) She’ll use the nest as a safe, cozy environment to give birth in and the babies will be warm and snugly inside until they are big enough to take on the world. Rabbits are born hairless, deaf and blind so the nest is essential to their survival. During the winter, use a closed nesting box or fill it with extra hay so the doe can burrow into it and keep the rabbits

---

**Nesting boxes are used as a safe place for the rabbit to give birth and the babies remain protected inside until they are large enough to venture out alone.**
warm.

Metal nests are used because they last a very long time, are easy to sanitize and they are great for summer nesting. In the summer, if the pups are hot, they will lie against the metal sides to dissipate heat. Barley straw is the best option to line nests. Shavings and sawdust are terrible for your rabbits – they absorb water and become damp and cold. The dust from it can also cause illness and breathing problems in your rabbits. Also, most wood products now contain some preservatives and it has been banned for use as hog bedding. A wood shavings nest would have to be changed at day 14, day 21 and every three days after that. USDA rules require that a nest box stay in until day 27 (in other words it can come out on the morning of the 28th day). A shavings nest will not last 28 days. A shredded paper nest lasts less time than shavings, and pups can get tangled up in it and choke, and it is a factory for producing staph germs. Same with sheep wool, never use it, the pups "spin" themselves into it and choke. A good barley straw nest can last up to six weeks without changing. It is shiny so sheds liquids, it has a hollow core so provides constant insulation value even when wet. Never use heat lamps over the rabbit nests. Top heat is not favorable for them and there is no way for them to get away from the heat if they are too warm. Use steady bottom heat if you must. But a good barley straw nest is often all the winter protection rabbits need. If any litter requires to be warmed up, take the whole box into the house to a place just over room temperature, and return it to the doe in the morning for feeding.

Nesting boxes can be purchased in many places, made from wood, sheet metal, wire or a combination of these. Because you’ll be needing several nesting boxes around the same time, you may find buying them a bit expensive. Building a nesting box yourself is a fairly simple and inexpensive option. The material you select will not only dictate the price for the box but also how much cleanup time you need later on.

As mentioned, metal is the best alternative. But if cost and easy of building the box yourself are factors, you may look at building wood nests. Unfortunately your rabbits will love chewing on it so you might find yourself replacing the nest often. Trimming the edge of a wooden nest with metal or providing lots of chew toys for your rabbit cuts down on the problem, though.

Regarding the flooring of the nest, building or buying one with pegboard floor will make sanitation a lot easier, especially if it is removable. You can use treated masonite peg board for the perforated floors of either metal or wood cages. Cut the peg board to fit the bottom of your nest, soak it in linseed oil and then dry it in a warm place for a couple weeks. It will become impermeable. A a hinged top is also a great option for simple cleanup in colder climates where the rabbits need more warmth.

Whether you buy or build your nest boxes, be aware of the box’s size versus the size of your rabbit. The box should be large enough for your mother doe to comfortably turn around in after bedding has been added to the box and the entrance hole should be easy for the mother doe to
fit through. The babies will also be hanging out in here for about 3 weeks so you need to allow
space for them too. Large breeds like New Zealands should have a nest about 12” by 24” by 12”
high.

Closing the box up with at least a partial top will give the mother rabbit a perch to escape to and
will keep babies warm in cold weather. This will also allow you to isolate a doe that is causing
problems with the pups. If you cannot close the box you will need to remove it from the cage. The
doe should then only be allowed into the box at morning feeding time (about 10 minutes) until
she behaves herself. Prohibited behaviors include digging up the pups in the nest, being late
pulling fur, sitting in the box, defecating and/or urinating in the box, being over-excitible, or ANY
other abnormal behavior regarding the nest. Just take it away, or close it off, except for morning
nursing time. After about 10 to 15 minutes, close off (or remove) the nest again. At this time,
check for any dead pups, pull the fur out from under them and distribute the fur over the litter.
Do NOT touch the pups or nest materials at all before the doe is allowed to nurse them; only
handle the pups after they have fed. Freshly suckled pups will smell like warm rubber balloons,
and look like them as well. By the time the pups are turning white (fur cover) the doe should have
settled down enough so that she can have continuous access to the nest.

Rabbit nest boxes usually either have an entrance hole cut in one of the shorter sides of the box,
towards the top (at least 6 inches off the floor) or the entrance hole is actually cut in the top of
the box. This keeps the babies from being dragged out by mother rabbit and keeps them inside
the box until they can get in and out on their own. It also decreases the risk of mother rabbit
trampling the kits when she has to jump up and into the nest. If you have a solid top on the box,
put a hinge on the entire top or a hinged door in one end to allow for easier cleanup.

**Keeping the Nest Clean**

An extra nest or two is essential when you need to clean it before the kits are ready to hop
around the cage freely. Nests, especially wooden ones, should be scraped and scrubbed with lots
of elbow grease and bleach or a disinfectant spray at weeks 2, 3 and 4 after the litter is born. Once
the majority of the funk is gone, take a small propane torch to the cage to lightly burn off the
remaining hair and manure (where nasty organisms love to grow and multiply.) Torching should
be used in combination with other cleaning because neither will get the job done alone. Leaving
the box out in the sunlight for a while will also help kill off harmful organisms.

An alternative cleaning process involves scrubbing and lots of bleach. First scrub out and rinse
boxes and floors, then wash them in strong bleach solution. Soak floors or wooden sides in clean
water, twice, scrubbing between soaks. Then drain them off and spray them with a strong bleach
solution, keeping them wet five minutes. Finally, air dry the nest floor and wooden boxes for at
least a week and re-bleach them. They are then ready to dry and be used again.

**The hutch card or journal lists**

It may not seem so vital but keeping good records about your breeding practices will allow you to
make educated decisions when it comes to the future of your rabbitry. That is why a hutch card or
breeding journal is so important. You’ll always know who came from where, who it’s ok to breed with, select the best replacements, find the best cross breed for your personal needs and it will allow you to sell rabbits should you need to.

See end of chapter (pages 17-18) for sample doe and buck breeding cards.

Feed storage container

A storage container for your rabbit feed such as a garbage can or a large pail or barrel with a lid is essential. Properly stored feed pellets will keep up to three months which allows you to stock up during significant sales. You will either want your container large enough to accommodate all that food or have another secure storage place for it. Leaving the feed in an open bag somewhere will invite rats, mice and other unwanted pests to a feast and you’ll start wondering why the bag always seems empty. Keep a measuring cup of some sort in the container to prevent overfeeding. Bucks and does without litters will eat about 5 ounces a day. Pregnant does and does with litters will eat significantly more because you are feeding them as much as they will eat without waste.

Other Equipment

- A hay manger or rack is essential for keeping fresh hay for your rabbits clean and unsoiled. It is simply a little cradle where hay can be laid to keep bunnies from trampling it. Some outside hutches are designed to share a hack rack between two cages, making feeding easier. You can also wrap a piece of string or wire around a clump of hay and tie it up from the roof of the cage.

- A scale to weigh kits is nice to have nearby. You’ll want something you can put a basket on or hang a basket from so you can keep small rabbits on the scale while you determine the weight.

- A propane torch is very handy for cleaning nest boxes and cages. You’ll invest a lot of elbow grease getting fur and manure off otherwise.

- Cleaning tools like brushes, buckets and soap

- Hay, straw or shredded paper for bedding.

- Some breeders tattoo or place ear tags on their rabbits for identification purposes. For show purposes, the right ear is reserved for registration marks applied by registrars of the American Rabbit Breeders Association.
| Date Bred | Fawn | Dam 
|-----------|------|------
| Date Farrowed | Date Kindled | Number in Litter | Litter Mark | Litter weight at 35 days | City Weaned | City Sold | City Kept | Expenses | Remarks |
### Buck Record Card

<table>
<thead>
<tr>
<th>Date Bred</th>
<th>Doe</th>
<th>Litter</th>
<th>Litter</th>
<th>Litter weight at</th>
<th>Kits Saved</th>
<th>Date Bred</th>
<th>Doe</th>
<th>Litter</th>
<th>Litter</th>
<th>Litter weight at</th>
<th>Kits Saved</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Breeds, Blood Lines and Buying

We have tried to cover all the breeds which are considered for meat and fur production but our top five picks can be seen on the right. We have developed a 5-star rating system which you will find in the following pages. It’s just a simple rating that we developed to help you recognize some of the easier, more popular breeds to raise right from the start. Don’t hesitate to research and learn as much as you can about the various commercial breeds until you find one or more breeds that you find suitable to your needs.

If you find a couple of breeds you like, you might also want to cross over breeds and create your own perfect rabbit. Californian and New Zealand rabbits are some of the most popular meat and fur production rabbits because they are said to be the easiest to raise and yield the most bang for your buck. White Florida and Champagne D’Argent rabbits are two additional breeds which have been gaining in popularity for meat and fur production. “Giant breeds” of rabbits are not generally selected because the bunnies take longer to grow to fryer size and dark-furred fryers (any color but albino white) are often less desirable because the meat has a darker tinge and the hide is harder to remove than on an albino fryer.

Rabbit fryers are rabbits which are 70 to 90 days old and weigh 3 to 5 lb (1 to 2 kg) live weight. Rabbit roasters are 90 days to 6 months old and weigh 5 to 8 lb (2 to 3.5 kg) live weight. Rabbit stewers are more than 6 months old and weigh over 8 lb. The older the rabbit is, the tougher the meat will be, hence an older, bigger rabbit would be best for stews, gulash, chili or similar dishes. Bucks (or males) typically weigh a couple pounds less than does (females).

Questions to consider:

- **How quickly should they rabbits be able to reproduce?** Is it important that you get started as quickly as possible? Large rabbits need to be about 8 months old to breed; small rabbits are ready in less than 6 months.

- **What sort of personality should your rabbits have?** Will the rabbits strictly be used for meat production or will the rabbits you keep for breeding be considered pets by someone in your family? Do you want the bunny to be cute and interesting or more aloof?

- **Do you have any particular interest in the color of their coat?** Do you care if the fur is all white or would you prefer something with more detail? Are you going to be selling/bartering the fur or using it for your own products?
Buying Rabbits

How many rabbits to get and what age?

A good number to start with is 4 rabbits - 2 bucks (males) and 2 does (females) but some prefer 1 buck and 3 does. Having more than one buck will decrease the likelihood of your rabbit refusing to mate because you have an alternative buck ready for her. You could buy all four (or more) rabbits of the same breed and then mate them within the breed to create purebred bunnies (which can be sold as well as eaten), or you can take multiple breeds which you cross-breed yourself.

With 2 bucks and 2 does, you have the option to start by mating one buck with both does, then breeding the other buck with does from the first litter, giving you 6 breeding rabbits in total. Another option is to breed one buck with one doe and the second buck with the second doe. Does from the litter can be bred with opposite bucks and so on. Never breed brothers to sisters but father-to-daughter, mother-to-son, first and second cousins, etc. are all ok. Learning the basics of genetics, linebreeding and inbreeding is highly recommended if you intend to breed seriously and especially if you will be selling your bunnies.

**5 Favorite Meat & Fur Production Rabbit Breeds**

- Californian
- New Zealand
- Florida White
- Palomino
- Silver Fox

You must also consider how old you want your rabbits to be when you buy them. The cheapest option is to get weaned bunnies but you will need to wait until they are at least 6 months old to breed. The other option, which is better for those who want to start breeding immediately, is to buy mature rabbits. The up-front cost will be slightly higher but you won’t have months of waiting to get started. Sometimes you can also find does that have already been bred for only a few dollars more each.

Where to buy rabbits

There are many places to buy rabbits, but if you want to be certain that you are getting a good line of rabbits with meat quality traits (high milk production, can be bred frequently, large litter size, good mother, fur easy to care for, not prone to sore hocks), you’ll need to find yourself a serious hobby or professional meat breeder. If you cannot find breeders who are raising for meat, you may consider looking to those who breed for show and pet rabbits. You’ll just need to be a lot more careful about the wording of your intentions as any decent breeder is bound to question your intentions. Rabbits coming with a long show pedigree list may also be more expensive.

- See The Ultimate List of Breeders (included with your purchase of *Raising Rabbits to Survive!*)
- Look in classified ads in your local newspaper and free classifieds
- Search Craigslist in your area
- Call your local feed store and ask if they know someone in the area

www.RaisingRabbitsForMeat.com
• Rabbit shows in your area. You probably won’t be able to bring any rabbits home but you can take a look at several breeds and obtain contact info for breeders in your area. If you have talked to breeders before the show, you can usually schedule pickup of your rabbits at the show to save travel time—especially if you are getting rabbits from more than one breeder.
• The American Rabbit Breeder Association’s website (www.arba.net/Breeders.php). You can narrow your search to specific states and rabbit breeds.
• In the United States, call the local county extension office and ask for a (4-H) rabbit contact.

A visit to the rabbit breeder’s facilities should tell you about their standards and if you want a bunny from them. A clean rabbitry is a healthy rabbitry so just have a look around and think about the following questions:

• Is everything clean? Is the housing well maintained?
• Do the rabbits look healthy?
• Do the rabbits have food and fresh water? Are the feeders and bottles clean?
• Is there a strange odor? Does it smell unpleasant?
• Do they have a fly problem?

If you answered “no” to the first three sets of questions and “yes” to the last two, leave and find another breeder. These rabbits are not being taken care of and you are likely to bring home a sick or diseased rabbit instead of a strong, healthy one.

It is possible that the breeder will not let you see their housing area because they fear the spread of disease. Although it sounds crazy, handlers can transmit diseases on their clothes and an outbreak of sniffles could kill their entire stock. Meat and fur breeders also get harassed frequently by animal rights organizations and one phone call could cause all of the breeder’s rabbits to be confiscated. So you can see why they may be hesitant to welcome you in.

TIP: Picking up rabbits

ALWAYS pick up a rabbit by firmly grasping the skin over the shoulders. Once he is up, bring him to your body with your other hand under his bottom, supporting the rabbit’s weight. NEVER pick a rabbit up by the ears or legs. This leads to permanent injuries. Also, wear gloves when handling rabbits to reduce the number of scratches you’ll receive.

Steer clear of pet stores, flea markets and backyard breeders. Rescue organizations are a good source for a pet bunny, but I don’t think most of them would be saving commercial rabbits from harm’s way. Animal shelters are also not a suitable place to get rabbits because they rarely would be able to identify the breed, you don’t know anything about the bloodline and their staff may not even be able to determine the rabbit’s sex. You also have no idea what sort of chemicals they may have been pumped up with or where they have been.

When you do find a breeder you feel comfortable with and select your bunnies, make sure the breeder demonstrates how to sex rabbits (determine male from female.) Explaining it is harder than seeing it and the information will be vital when you’re trying to figure out which rabbits to breed, butcher or sell.

Once the rabbits become more mature, some physical traits will give away their sex: medium and large breed does have nipples and a dewlap (a large skin fold under their chin); bucks have
blockier heads, are usually a bit smaller than does and usually have visible testicles after 3 months of age.

If you buy weaned bunnies, mark their ears so you can identify them later. This will keep you from mixing up the males and females and you’ll also know which bunny is which for your breeding log. If you choose to tattoo them already, be sure to use the left ear if you are planning to show the rabbits at any point. You may want to do so to determine how well established the lines are in your rabbits. The American Rabbit Breeders Association has reserved the right ear as their show marking ear.
19 Commercial Rabbit Breed Suitable for Meat & Fur Production

Altex ♥♥♥♥

**Adult Size:** Large (10-20 pounds/ 4.5-9 kilograms)

The Altex rabbit was first developed as a sire rabbit in 1986 at Alabama A&M University and later at Texas A&M University-Kingsville. It was bred from Flemish Giant, Champagne d' Argent, and Californian rabbits. The Altex was genetically selected for heavy 70 day market weights for over 20 generations. Color markings are that of a Californian but Altex generally weigh more.

The Altex is not meant to be the sole rabbit breed in a meat rabbit producer’s rabbitry. The Altex lack many of the best qualities of Californian and New Zealand White rabbits. For example, they are harder to get to mate and they often have smaller litters (6-7 kits). The Altex’s main strength shows when they are crossbred, producing rabbits that have faster weight gain. This creates a more efficient performance and ultimate greater profits from the herd. Altex/New Zealand White crossbred fryers typically reach market weight a week earlier than purebred New Zealand White fryers. Another recommended cross is the mating from an Altex buck to a Californian/New Zealand White crossbred doe.

American Blue & White (German Blue Vienna) ♥♥♥♥♥

**Adult Size:** Large (9-12 pounds/ 4.5-4 kilograms)

The American Blue rabbit was originally known as the German Blue Vienna. The name was changed in American shortly after World War I but can still be found in other parts of the world as the German Blue Vienna. American rabbits have an ideal mandolin body and the deepest blue color of any of the recognized breeds in America. A white variety was recognized in 1925 which has White Flemish Giant blood and caused white spotting. American rabbits were a popular breed in America for fur and meat until the 1950's. They are now the rarest variety of rabbit in America.

Americans are large rabbits with mature bucks weighing 9 to 11 pounds and does at 10 to 12 pounds. They are a hardy breed, docile in nature, produce large litters and are typically good mothers. Fryers make marketable weight fairly quickly and are easily kept on wire bottom hutch.
**American Chinchilla ♥♥♥♥♥**

**Adult Size:** Large (9-12 pounds / 4.5-5.4 kilograms)
The American Chinchilla, or “Heavyweight Chinchilla,” rabbit has good meat qualities, is easy to care for (no regular grooming required) and has a soft, beautiful coat. The body is medium boned with a deep loin and broad shoulders. American Chinchillas are easily dressed and their meat is considered to be of good quality and taste. Males weigh 9-11 pounds and females are usually 10-12 pounds.

The larger breed was created in the 1920s from Standard Chinchillas to optimize meat production and create a larger pelt. It is not commonly known outside the U.S. and the breed is actually in danger of becoming extinct. It **should not be confused with the rodent called chinchilla** which has a long tail.

These stocky rabbits have a slight curve to their medium length bodies, beginning at the nape of their necks and following through to the rump. They carry their ears straight up and erect.

**American Sable ♥♥♥**

**Adult Size:** Medium (7-10 pounds / 3.5-4.75 kilograms)
Bred from Chinchilla rabbits, Sables differ only in color. The head, feet, ears, back, and top of the tail are dark sepia, while their soft, dense coat fades to a lighter tan over the rest of the body, similar to the coloring of a Siamese cat. The Sable color does not breed true and are born in three varieties of colors: white (resembling a Californian rabbit), dark seal, and a silvery gray coat. The breed’s eyes are usually dark brown with a ruby hue, especially when reflecting light. This rabbit carries an albino gene which causes this red glow and also why some kits are born white.

The coat is a medium length and Sables may need more brushing than some breeds because of their long shedding patterns. Sables are very affectionate and love attention but can be moody.
Beveren ♥♥♥♥♥

**Adult Size:** Medium (8-11 pounds/ 3.6-5 kilograms)
The Beveren is one of the oldest and largest breeds of fur rabbits, originating in Belgium. Their coats can be blue, white, black, brown or lilac but only solid blue, solid black and blue-eyed white breeds are currently recognized by the American Rabbit Breeders Association. There is a rare variety called the Pointed Beveren, which comes in the same colors but has white tipped hairs. The blue variety is the original. The fur has a gentle rollback and the coat should be dense and glossy. Fur length is rather long at 1 1/4 to 1 1/2 inches.

This large breed has a pronounced mandolin shape with mature bucks at 8 to 11 pounds and does at 10 to 12 pounds.

They are a rare breed but well tempered, clean, and smart. The fur is rather long (about 1 1/4 to 1 1/2 inches), dense and glossy. The breed is hardy and well suited for meat production because they produce large litter sizes, the young grow fairly fast, and the does are typically docile while also being good mothers.

Californian ♥♥♥♥♥

**Adult Size:** Medium (7-10 pounds/ 3.5-4.75 kilograms)
Californian rabbits were developed not only for good meat but also good fur production in the USA in the 1920’s. Californians are a cross of Himalayan, Standard Chinchilla and New Zealand white rabbits. It is currently the second most popular meat producing breed in the world.

The body is plump but fine-boned. Californian rabbits still look very similar to the Himalayan rabbit with a predominantly white body and black on the feet, nose, ears and tail. They have pink eyes.

Californians are an excellent meat rabbit breed. They usually produce large litters of 8-12 kits, which have a fast growth rate to fryer size (4-5lbs) in 8-12 weeks. They may not be so suitable for children to assist with because they can be difficult to handle by an inexperienced person. The average life span of a breeding Californian rabbit is 5 to 10 years.

© American Beveren Rabbit Club

© Ervinpospistol

www.RaisingRabbitsForMeat.com
Champagne D’Argent ⭐⭐⭐⭐⭐

**Adult Size:** Large (10-15 pounds/ 4.75-6.8 kilograms)
The Champagne d’Argent is one of the oldest known rabbit breeds, existing in the Champagne province of France for over 400 years. Then called the French Silver for its silvery coat, it was once prized for its pelt despite being a common breed. Champagnes are not so common in America today, but their popularity is increasing.

Bunnies are born pure black, begin turning silver grey at about 3 weeks and are completely silver grey by 6 months. The rabbit has a medium length with well-developed hind-quarters. They are generally docile and good natured.

Crème D’Argent ⭐⭐⭐

**Adult Size:** Medium - Large (8-11 pounds/ 3.6-5 kilograms)
Crème d’Argent rabbits are similar to the Champagnes but generally weigh a bit less. At birth their fur has lots of orange coloring but as they grow older they become a more creamy white with a bright orange undertone.

The Crème D’Argent breed originated in France in the mid to late 1800’s and was sought after for its fur. The breed was introduced to America around 1920 and was sometimes also bred with other breeds such as Golden Palominos. Today, the Creme d’Argent is a rare breed. The American Livestock Breeds Conservancy, an organization devoted to breed preservation, lists the Creme d’Argent on its "Watch" list.

Although Crème d’Argent rabbits are considered a meat breed, they can be difficult to raise. Aggressive behavior may present itself, especially in females, but they are usually a rather docile, friendly and gentle breed. They also don’t put on weight as well as other breeds.
Cinnamon ♥ ♥ ♥

**Adult Size:** Large (8.5-11 pounds/ 3.9-5 kilograms)

Cinnamon rabbits are large, attractive rabbits but are a bit high maintenance because you need to brush them daily to keep their cinnamon-colored coat from getting matted.

Bucks weigh about 9.5 pounds and does slightly more. The fur of a Cinnamon rabbit has a rich russet brown color, similar to that of cinnamon.

They are a cross of New Zealand Whites, Chinchillas, Checkered Giants and Californians which was developed in Montana. It was first accepted as a breed by the American Rabbit Breeders Association in 1972.

Florida White ♥ ♥ ♥ ♥ ♥

**Adult Size:** Small (4-6 pounds/ 1.8-2.7 kilograms)

Although this rabbit is quite small, it was bred in Florida in the 1960’s as a meat rabbit which would also be functional for laboratory use. Its lines originated from small New Zealand, Polish White and Dutch White rabbits.

The fur is white with good density and texture, and they have a compact, meaty body, short neck, and small head. The ideal Florida White is a short bodied, well rounded with plenty of muscle for size in the hindquarters, back and shoulders. The ideal senior weight for the breed is 5 pounds, with an acceptable range from 4-6 pounds. Separating them early is crucial since they often mature quickly.

Florida Whites are generally docile, good natured rabbits that make excellent mothers. Because of its smaller size, Florida Whites are ideal for those who don’t have a lot of space to devote to their rabbitry or who may be raising them indoors.
French Lop ♥ ♥ ♥

**Adult Size:** Giant (12+ pounds/ 5.4+ kilograms)
A French Lop is a popular breed of domestic rabbit that was first developed in France in the 19th century. It was created from crossbreeding English Lops and Flemish Giants but the French Lop has shorter ears and is stockier than the English. The French Lop has a dense, soft coat that comes in two color varieties: solid and broken, and within these categories can be found a number of different rabbit colors, including agouti, black, broken marked, chinchilla and sooty-fawn.

French Lops are very large, heavy rabbits which can produce large litters of 5-12 bunnies but should not be bred after three years of age. The ideal age for the female French Lop to start breeding is 9 months old. The average life span of a French Lop is about 5 years.

The breed is generally good natured but must be watched for signs of hostility. Because of its size, a French Lop may also need a larger living space and is not really ideal for children.

Harlequin ♥ ♥ ♥ ♥ ♥

**Adult Size:** Medium (7-9 pounds/ 2.7-3.6 kilograms)
Harlequins are usually pretty docile, make good mothers and foster kits well. The ideal age for a Harlequin doe to start breeding is 5 to 6 months old.

There are two varieties of Harlequins: Japanese are golden orange with colored markings and the Magpie is white with colored markings. A well bred Harlequin will have white or orange on one side of the face with a straight, clean line dividing it from the other side of the face, which would be colored. The ear attached to the white or orange side would be colored, and the ear attached to the colored side would be white or orange. The body is alternately striped with white or orange and color.
Hotot or Blanc d’Hotot ❤❤❤❤

**Adult Size:** Medium (7-10.5 pounds/ 2.7-4.8 kilograms)
The Hotot breed originated in Hotot-en-Auge, France and was bred by Eugenie Bernhard, the second woman to be credited with creating a new breed of rabbit. The breed is fairly new to the United States but is considered endangered by the American Livestock Breeds Conservancy.

It has a unique coloring of a pure white body with black circles around the eyes, similar to spectacles. The black ring should be no more than 1/8 inch wide. Hotots grow to between eight and ten inches in length, and are stocky.

The white coat will require regular grooming but it is a very docile rabbit. They are an active, hardy breed and are easily raised in all wire cages. They are fairly good mothers, have good-sized litters, and the young grow rather fast.

New Zealand ❤❤❤❤❤

**Adult Size:** Large (8-12 pounds/ 3.6-5.4 kilograms)
Despite the name, New Zealand rabbits were first bred in America in 1916 for meat and fur production and are currently the number one meat rabbit in the United States. The original breeds used to create the New Zealand breed are unknown.

They come in several different colors (black, red and white) but the white rabbits are the most popular for meat production because of their large, broad, and muscular bodies.

When mature, bucks weigh from 8-10 pounds and females from 9-12 pounds. New Zealand rabbits are ready to slaughter as fryers after just 2 months but older rabbits can also be slaughtered as roasters. Their average litter is 8-10 bunnies.

They are quite social and outgoing, and enjoy being part of the family. They like everybody, including most other household pets, and seldom bite. They also don’t mind be handled and are quite outgoing. For these reasons, they are also great rabbits to get started with.
**Palomino ★★★★

**Adult Size:** Large (8-11 pounds/ 3.6-5 kilograms)

Palomino rabbits have a smaller bone structure than other meat rabbits which gives you a higher meat ratio. They are actually one of the meatiest rabbits out there, but they take a bit longer to grow. Bucks may be 8-10 pounds and does usually range from 9-11 pounds. Litter size is usually 8 kits but can range from 6 to 12. Solid wide shoulders and hindquarters as well as firm flesh condition throughout shows a rabbit that produces muscle. This means that they can also produce a five pound fryer for meat production also.

Palominos come in two colors: Golden & Lynx. The Golden has an orange/brown golden color (as the name suggests) and the Lynx has a bit more grey or silver tone in the fur.

They have a very docile and friendly temperament, and like to be around people.

**Rex ★★★

**Adult Size:** Medium (8-9 pounds/ 3.6-4 kilograms)

The Standard Rex is not one of the more popular commercial breeds because they are a bit smaller than other breeds and have a lower meat-to-bone ratio. The breed originated in France in 1919 as the result of a recessive genetic mutation leading to guard hairs that are no longer than the undercoat. They have fine, velvety fur which is about half an inch in length (1.27 centimeters.) This short fur does make them more susceptible to sore hocks from constantly standing on the wire cages. Putting a wooden board or a mat for them to rest on in their cage could help prevent that.

A Rex rabbit is a great foster mother and a pair of them can be housed together, allowing them to be bred in very small areas. The breed is intelligent and can be quite affectionate.

The Standard Rex is bred in many, many different colors and also has blue eyes instead of brown. It has a slightly broader head than other breeds of rabbit, proportionate and upright ears as well as toe nails that match the color of its fur.
Satin ♥♥♥♥

**Adult Size:** Large (8.5-12 pounds/ 3.9-5.4 kilograms)  
The Satin breed has translucent hair shafts that reflect light, giving the coat a very high sheen. Coat color ranges from black to copper to white...and many things in between. The ears stand erect and should be well covered with fur. The medium-length body should have well conformed hind quarters with a continuous curving top line (shoulders to the top of the hips).

A high protein diet supplemented with sunflower seeds helps maintain good body tone and a healthy coat but no special care other than routine brushing is required.

Satins have one of the best meat-to-bone ratios of the commercial breeds and other characteristics which make them great for meat production are their good growth rates, their great motherly instincts and their ease of breeding.

Silver Fox ♥♥♥♥

**Adult Size:** Large (9-12 pounds/ 4.1-5.4 kilograms)  
The Silver Fox is considered the teddy bear of the commercial breed and is very well suited for meat breeding. It has a high dress out percentage (65%) with a small boned carcass, does are excellent mothers with large litters, they have plenty of milk and they make excellent foster mothers. They are also gentle, easy to handle, like attention and have beautiful long fur.

Their fur resembles the pelt of an Arctic silver fox: coarse, extremely dense and 1 ½ to 2 inches long. Kits are born either solid black or blue and silvering will start at 4 weeks, taking about 4 months to complete. Unlike any other rabbit breed, when the fur is stroked backwards from tail to head, it will stand straight up until stroked in the opposite direction.

The breed is considered critically endangered and is not recognized in outside the U.S., although in Australia, New Zealand and the United Kingdom there is a breed called Silver Fox, which is actually the same rabbit breed as the Silver Marten in America.
Silver Marten ⭐⭐⭐⭐

**Adult Size:** Medium (6-9.5 pounds/ 2.7-4.3 kilograms)
The Silver Marten was a by-product from the Chinchilla in the 1920’s when the Chinchilla breed was trying to be improved. Due to the extremely low number of breeders registered, this breed is considered critically endangered by the American Livestock Breeds Conservancy.

Their fur is very soft and beautiful, and they are bred in four color varieties: black, blue, sable, and chocolate. Black is the most common.

Silver Martens have a lower meat-to-bone ratio like the Rex and are more timid than some large breeds but are very playful.
Health, Nutrition & Feeding

A Few Basics on Rabbit Health

The most basic of rules applies for rabbitries: **a clean rabbitry is a healthy rabbitry.** Disease is natural and can never be completely eliminated, but through intelligent practices, you can usually keep it at a low level. Maintaining and cleaning the housing and other equipment regularly and doing daily checks on your rabbits will prevent a lot of problems. You can also select your breeding stock based on high resistance, long life and high productivity. Handle the rabbits, the feed and anything else they touch, eat or drink from only as much as you need to. Your clothing and hands can easily spread disease.

**Proper handling** and restraint is important. Rabbits have powerful hind limbs, which can kick out and lead to broken backs. Rabbits should never be held by the ears! Instead grab a large handful of the scruff at the neck and support the body under the rump with your other hand. If they are not held properly and securely, fractures or luxations of lumbar vertebrae may follow struggling. You may want to wear gloves to protect yourself from scratches, or try using a thick towel to gather the rabbit it which will make it feel more secure.

**Toenails** on the hind legs can cause some serious scratches on your unprotected arms so be sure to trim them every 1-2 months.

When **introducing new stock**, whether it’s a completely new rabbit or one that has merely been in contact with other rabbits, isolate it for a period of time. If you think a rabbit if getting sick, quarantine it and take care of it after all healthy rabbits have been checked.

**Normal body temperature** is 103.3-104°F. Body temperature <100.4°F or >105°F is cause for concern.

Common Problems - Symptoms, Treatment & Prevention

All animal drugs are now under federal regulations. These regulations are designed to protect the public health and welfare by setting drug safety and tissue tolerance levels. The tissue tolerance levels made it necessary to establish specific withdrawal times and other warnings and cautions. The manufacturer's instructions, by law, are placed on the label of each drug container. Follow these instructions, warnings, and withdrawal times precisely. Observe all local laws and regulations governing proper drug usage. Dosages may change so always check the label before administering any drugs.

For further information, visit The Merck Veterinary Manual online: [www.merckvetmanual.com](http://www.merckvetmanual.com)
Coccidiosis, Intestinal

Coccidiosis is caused by “coccidian” protozoa and it is the most common disease in rabbits. It is very difficult to cure and young rabbits are most at risk.

**Symptoms:** In mild cases, no symptoms may be noticeable. In moderate to severe cases, your rabbit may have no appetite, diarrhea or stop gaining weight. It might also appear bloated or as if it has a pot belly.

**Treatment:** Ponazuril (aka Marquis from Bayer) was developed to treat a microsporidian parasite in horses, but it has been found extremely effective for permanently removing coccidia in rabbits. In the UK and Australia, there is a product called Baycox (toltrazuril) which has the same effect and is less expensive. Only 3 doses (1 per day are required) although some prefer to dose an additional 2 days to ensure that the protozoa are gone.

Previously it was not possible to rid the rabbit of the protozoa, only control their growth. This was done with a .025% level of sulfaquinoxaline in the feed for three or four weeks, or in the water for two or three weeks. Other sulfa drugs (sulfadimethoxine, triple sulfa, etc.) may be effective but are less toxic than sulfaquinoxaline. Amprolium in the feed or water was also sometimes effective. Not only are most coccidia resistant to these now, but as mentioned, the treatment lasted several weeks.

After an outbreak, be sure to sanitize and fully disinfect housing, cages, bedding, food and water dishes - anything your rabbit has come into contact with which would harbor coccidial protozoa.

**Prevention:** Keep rabbit housing clean and sanitize regularly. Design housing so droppings can fall through to the floor. Keep feces out of food and water. Use a hay rack or tie the hay up with a wire or string to keep it from getting trampled on and soiled.

Conjunctivitis (Weepy Eye)

**Symptoms:** The rabbit’s eyelids are inflamed or swollen. The eye is bulging or there is discharge coming from the eyes. The area around the eye is red or hair is falling out around the eye. The eye has swollen shut. Your rabbit is probably also rubbing or scratching his eyes. The fur around the eyes may become wet, matted or tear stained.

**Treatment:** If eye becomes irritated, flush the infected eye with eye wash. The irritation should clear up quickly. If the eye does not improve, apply a 5% sulfathiazole or antibiotic eye ointment under the eyelids. A rabbit with pasteurellosis will often transmit disease organisms to the eye, so treat for this disease if symptoms are present.

**Prevention:** Keep rabbits away from irritants like smoke, dust, sprays or fumes. Don’t use bedding that contains dust and keep fines (dust from feed pellets) cleaned out of the
feeders. Eliminate/don’t rebreed rabbits with persistent eye problems to prevent continued spread.

Ear mites

**Symptoms:** Ear mites are noticeable by a brown, waxy build-up in one or both ears which will become scab-like after a day or two. You may also notice your rabbit scratching or shaking his head more often than usual. Don’t let the problem go untreated because your rabbits will start to scratch, opening up the scabs and leading to infection or possibly deafness. Don’t remove the crusts; they will fall off on their own. You’ll leave open wounds in your rabbit’s ear and cause it pain by removing them. Treat all rabbits near the infected one and newly introduced rabbits.

**Treatment option 1:** Quarantine the sick the rabbit to prevent the spread of infection. Use over-the-counter ear mite medication for rabbits or cats. Follow the treatment instructions found in the package.

**Treatment option 2:** Quarantine the sick the rabbit to prevent the spread of infection. Use any mineral based oil (baby oil, vegetable oil) to suffocate the mites and kill them over the course of a month. Mite eggs live for 21 days which is why you need to continue the treatment for so long. On days 1, 2, 4, 6, 8, 10, 14, 21 & 28, do the following: Warm the oil to a lukewarm temperature and use a dropper or syringe to put 2-3 drops into the rabbit’s ear. Gently massage the base of the ear.

**Prevention:** Keep dirt and dust to a minimum. Don’t use straw for bedding because mites love it. Spray your hutches or cages with 1 part bleach to 3 parts water periodically.

Enteritis Complex (Bloat, Scours)

**Symptoms:** The literal translation of enteritis means "inflammation of the intestine." This group of diseases severely injures the intestines and digestive tract. The rabbit may exhibit loss of appetite, weakness, a drop in body temperature, diarrhea, rough hair coat, and weight loss. The abdomen may be bloated because of excessive production of gas in the intestines by disease organisms. You may also notice that droppings are covered by a mucus.

**Treatment:** Water soluble chlortetracycline or oxytetracycline at a concentration of one pound to 100-150 gallons (4 grams/gallon) of drinking water may be effective.

**Prevention:** The cause of the condition is not known.
Hairballs

**Symptoms:** Your rabbit’s droppings will likely be smaller (because the rabbit is eating less due to the build up of hair in the stomach) and the pellets might be strung together or have hairs visible in them. Eventually the rabbit’s stomach will grow, making the rabbit appear fat but feeling the rabbit’s spine will show that it is undernourished (the ribs will be pointy to the touch.) The rabbit will ultimately starve to death if left untreated.

**Treatment:** Feed as much hay, tree branches and other roughage as your rabbit will eat. Contact a veterinarian.

**Prevention:** Rabbits shed their hair every three months, alternating between light and heavy sheds. Brush and comb your rabbit once a day during heavy sheds (which could last days or weeks, depending on the breed) and once a week the rest of the time. Feed fresh hay and other roughage to your rabbits daily to help them digest hair they consume while cleaning themselves. If you like, you can give your rabbits feline hairball treatments like Petromalt and Laxatone to prevent fur build up. Allowing your rabbit to exercise outside the cage will also help with digestion.

Heat stroke

**Symptoms:** Affected rabbits pant rapidly and lie on their sides. They will often be limp and floppy. Untreated, the rabbit will become dizzy, uncoordinated and might go into convulsions. A blood tinged discharge may come from the mouth and nose. Death results unless the rabbit is treated. Pregnant does are most susceptible.

**Treatment:** Do anything that will begin to cool down the rabbit slowly. Provide plenty of ventilation and fresh water. Sprinkling water on the roof of the hutch or draping a dump burlap sack over the cage may help reduce the temperature inside. Put individually exhausted rabbits on wet burlap or immerse them in lukewarm water so the body temperature gradually drops. NEVER use cold water as this can cause shock. An unresponsive rabbit can be fed water through a plastic syringe (no needle) or eyedropper. Insert the water very slowly into the side of his mouth, just behind the large front teeth, being careful that the rabbit does not inhale the water into his lungs. Rabbits having convulsions or that are unconscious should be taken to a veterinarian immediately.

**Prevention:** Heat exhaustion can happen any time the temperature is above 92°F (28°C.) Poor ventilation and high humidity contribute to the condition. Provide plenty of clean, cool drinking water for rabbits. Allow them access to a bowl of water on especially hot days so rabbits can put their feet in the water to cool themselves. Provide additional salt spools for the rabbits. Keep hutches or cages in shaded areas.
Malocclusion

Rabbit’s teeth continue to grow throughout their lifetime and they need tough, fibrous plant matter (hay, grass, vegetables) to constantly be worn down. Sometimes, the teeth wear so irregularly that they don’t meet anymore, which is called malocclusion. Malocclusion could occur because your rabbit just has bad genetics or a trauma could have caused the problem, but usually a lack of fiber is the cause of this disease.

**Symptoms:** Decreased appetite, avoidance of hard food or weight loss. Saliva or food build up around the mouth or inside the front legs. Discharge from the cheek or lower jaw area or a lump on the outer cheek, below the eye or under the lower jaws. Bad breath. Incisors that are uneven. Many times you won’t notice any symptoms at all.

**Treatment:** X-rays will need to be done to ensure that it is malocclusion and a veterinarian will need to sedate the rabbit and file down his teeth. Infection could also be present and will need to be treated. The rabbit will never fully recover from this or be 100% normal, needing frequent check-ups and refiling of the teeth. If left untreated the condition will only get worse. You may choose to cull the rabbit instead of seeking treatment.

**Prevention:** Provide lots of things for your rabbit to chew on (tree branches, leaves and fiberous vegetables) in order for him to wear his teeth down properly. See the safe and unsafe food cheat sheet for rabbits (including tree trimmings, leaves and more) on pages 41-42 of this ebook. A more complete list can be found in the Appendix on pages 73-81

Caked Mammary Glands

**Symptoms:** When a lactating doe’s breasts become congested and hard knots form on the sides of the nipples. They may break open, showing dried milk. The condition is caused by milk buildup in the breasts. It usually occurs after a high producing doe loses her litter or when the doe refuses to nurse because of nipple soreness.

**Treatment:** With moderate caking, rub oil of camphor on the area twice daily for 3 to 5 days. This will break up the cake and it can then be removed. Treatment could take longer with high producing does.

**Prevention:** Do not wean young suddenly; remove the bunnies over several days or weeks. If a litter is lost, breed the doe again immediately and carefully watch her for symptoms. Keep sharp and protruding edges trimmed from nest boxes to prevent breast injury. Watch for signs of mastitis infections; they often follow caked mammary glands.
Mastitis (Blue Breast)

Mastitis, a bacterial disease, isn’t often seen in rabbitries but if it should break out, it can spread very quickly.

**Symptoms:** Following injury to the mammary glands or caked glands, glands may become inflamed, swollen and feverish. The glands may turn bluish as the rabbit’s condition worsens. The doe refuses to eat but may drink lots of water. She may have a fever of 105°F or higher.

**Treatment:** Treatment must be started early to be successful. Reduce the doe’s milk production by cutting back on feed. Clean and disinfect the cage, nest box and other equipment. Repair any sharp edges. Inject 75,000-100,000 units of penicillin into the muscle twice daily for three to five days. In severe cases it is best to destroy the doe and young. If your doe should die, don’t transfer the young to another healthy doe or you will spread the disease. Hand feed the young instead with a milk substitute.

**Prevention:** Keep sharp and protruding edges trimmed from nest boxes to prevent breast injury. Carefully watch does with caked mammary glands for signs of mastitis.

Pasteurellosis (Snuffles, Cold)

**Symptoms:** This may be an acute or chronic inflammation of the mucous membranes in the air passages and lungs. Mucus is discharged from the nose and eyes. Affected rabbits rub their eyes and noses, sneeze and cough or may make a loud snuffling or snoring sound. The fur on the face and paws becomes matted and caked with dried mucus.

**Treatment:** Early treatment is critical. Use antibiotics such as enrofloxacin (Baytril), ciprofloxacin, and trimethoprim sulfa for 14-30 days. Follow a control program of tetracyclines to prevent recurrence. Adding .025% sulfaquinoxaline in the feed for three or four weeks or sulfaquinoxaline in the water for two or three weeks reduces disease transmission to the young. You may use other sulfa drugs if you follow label directions. If the infection goes for days or weeks without treatment, it is likely to become chronic. The signs of the disease may disappear but the bacteria are usually still present, only in smaller numbers. Even in cases that are treated early, some animals will still develop chronic infections in their sinus passages that require long-term treatment, or even lifelong treatment to keep them under control. To prevent risk to your entire stock, cull infected rabbits and replace them with clean breeding stock.

**Prevention:** The disease is caused by a bacterial infection and usually occurs when the rabbit’s resistance is low or it is under a stressed condition. Eliminate drafty, damp, unsanitary conditions in the rabbitry. Follow a strict sanitation and management program. Rabbits that have recovered from this disease acquire little immunity and often remain carriers.
Sore Hocks (Ulcerative Pododermatitis)

**Symptoms:** A rabbit with sore hocks will have no fur on the back legs, or “hocks.” The feet may be red or scabbed and may even have become raw and infected. In severe cases, the front paws may also become affected. Should sore hocks be diagnosed, immediate treatment is necessary. If left untreated, your rabbit may stop eating or refuse to breed because of the pain and irritation. The rabbit could have to be culled if the infection gets too bad.

**Treatment:** In order to treat sore hocks, you first need to locate what caused the problem and clean it up. Remove soiled bedding and feces quickly and prevent the bottom of the housing from collecting water. These areas should be scrubbed clean and sanitized with 1 part bleach and 2 parts water. When the floor is dry, the rabbit can move back in. You also need to spend some time on your rabbit’s feet. Clean them with warm water and mild soap, trim his nails afterward. Cut fur away from red or raw areas and apply an antibiotic ointment. Iodine can also be used but should be followed with hemorrhoid ointment. Caution: The antibiotic amoxicillin is extremely toxic to rabbits.

**Prevention:** Keep your rabbit’s housing clean. Replace bedding every other day. Keep hutches in good shape. Provide a resting pad for rabbits and sanitize it regularly with bleach. Trim your rabbit’s toenails once a month.
Feeding

Feeding is the most expensive part of raising rabbits for meat but what you put into your rabbit will be directly reflected in what you get out. Quality, not quantity, is the key. Rabbits are vegetarians but a large portion of the meat rabbit’s diet needs to be proteins and amino acids. It would be impossible for the rabbit to obtain these amino acids from salads alone.

If you’re not focusing on the goal of high production, rabbits can easily survive on grains, vegetables, lawn clippings, or garden and table scraps. During the Great Depression and in third world countries, people do this all the time. The rabbits continue to produce and grow, but their litters are smaller and grow more slowly. This is certainly not idea for meat production. In addition, rabbits on this diet plan may also lack protein, salt and other nutrients that they normally consume from feed pellets. Using a good store-bought feed just simplifies your feeding routine and keeps you from spending a lot of time mixing together your own feed. An over- or underweight doe is more susceptible to disease and may have trouble breeding and kindling.

Rabbits should be fed once a day. Because they are nocturnal, they usually feed at night so do your checks and feedings in the evenings. The feed should remain clean and fresh so only give them enough to last until the next feeding. Old or moldy feed can be very harmful to rabbits and the feeder should be checked daily to make sure water has not leaked in and caked the feed into the corners of the container.

Feeding Pellets

If you go the simple route (and we recommend it unless you want to feed organic or you cannot obtain feed for some reason), a high quality feed pellet should be fed along with fresh timothy or alfalfa hay and other supplements. Hay should be kept up off the floor in a hay rack or you can tie it to the cage ceiling with wire to prevent it from getting soiled.

High quality does not always mean high priced but the pellets should contain at least 16% fiber to stimulate gut function and prevent diarrhea and hairballs. The major ingredient in rabbit feed should be legumous hay and is usually alfalfa. You will also find minerals, supplements, preservatives, and sometimes medications mixed into the ground hay and grain: which should be everything needed to keep your rabbits thriving.

Rabbits love celery, carrots and other vegetables, and adore fruits like apple or pears, but these treats should be given sparingly. They also love the trimmings from your fruit trees. Feeding treats like these is likely to make your rabbit more docile and will stimulate its appetite. It wears down teeth too.

See the safe and unsafe food cheat sheets for rabbits on pages 41-42 of this ebook or the Appendix for a more complete list of less common foods (pages 73-81).
<table>
<thead>
<tr>
<th>SAFE Vegetables, Herbs &amp; Grains</th>
<th>SAFE Leaves from Trees &amp; Shrubs (Leaves should be fresh and young)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrimony</td>
<td>Horseradish</td>
</tr>
<tr>
<td>Alfalfa</td>
<td>Jerusalem artichoke</td>
</tr>
<tr>
<td>Apple</td>
<td>Knapweed</td>
</tr>
<tr>
<td>Apple</td>
<td>Knotgrass</td>
</tr>
<tr>
<td>Aven</td>
<td>Kohlrabi</td>
</tr>
<tr>
<td>Balm</td>
<td>Lavender</td>
</tr>
<tr>
<td>Balm</td>
<td>Lovage</td>
</tr>
<tr>
<td>Basil</td>
<td>Mallow</td>
</tr>
<tr>
<td>Beetroot</td>
<td>Marjoram</td>
</tr>
<tr>
<td>Blackberry</td>
<td>Mayweed</td>
</tr>
<tr>
<td>Borage</td>
<td>Maywort</td>
</tr>
<tr>
<td>Broccoli</td>
<td>Meadowsweet</td>
</tr>
<tr>
<td>Buckwheat</td>
<td>Melon</td>
</tr>
<tr>
<td>Burnet</td>
<td>Milk thistle</td>
</tr>
<tr>
<td>Camomile</td>
<td>Mugwort</td>
</tr>
<tr>
<td>Caraway</td>
<td>Nipplewort</td>
</tr>
<tr>
<td>Carrot</td>
<td>Oats</td>
</tr>
<tr>
<td>Celery</td>
<td>Orache</td>
</tr>
<tr>
<td>Celeryiac</td>
<td>Oxeye daisy</td>
</tr>
<tr>
<td>Chervil</td>
<td>Parsley</td>
</tr>
<tr>
<td>Chickweed</td>
<td>Parsnip</td>
</tr>
<tr>
<td>Chinese leaf</td>
<td>Pear</td>
</tr>
<tr>
<td>Cleavers</td>
<td>Peppermint</td>
</tr>
<tr>
<td>Clover, white</td>
<td>Pigweed</td>
</tr>
<tr>
<td>Coltsfoot</td>
<td>Plantain</td>
</tr>
<tr>
<td>Comfrey wilted slightly</td>
<td>Pumpkin</td>
</tr>
<tr>
<td>Coriander</td>
<td>Radish greens</td>
</tr>
<tr>
<td>Corn marigold</td>
<td>Raspberry</td>
</tr>
<tr>
<td>Corn spurrey</td>
<td>Sage</td>
</tr>
<tr>
<td>Cow parsley</td>
<td>Savory</td>
</tr>
<tr>
<td>Crosswort</td>
<td>Sanfoin</td>
</tr>
<tr>
<td>Cucumber</td>
<td>Shepherd's purse</td>
</tr>
<tr>
<td>Dandelion</td>
<td>Silverweed</td>
</tr>
<tr>
<td>Dead-Nettles</td>
<td>Sow thistle</td>
</tr>
<tr>
<td>Dill</td>
<td>Soya</td>
</tr>
<tr>
<td>Dock before flowering</td>
<td>Strawberry</td>
</tr>
<tr>
<td>Endive</td>
<td>Swiss Chard</td>
</tr>
<tr>
<td>Fat hen</td>
<td>Tare</td>
</tr>
<tr>
<td>Fennel</td>
<td>Tomatoes</td>
</tr>
<tr>
<td>Goosefoot</td>
<td>Trefoil</td>
</tr>
<tr>
<td>Goosegrass</td>
<td>Vetch</td>
</tr>
<tr>
<td>Goutweed before flowering</td>
<td>Vine leaves</td>
</tr>
<tr>
<td>Ground elder before flowering</td>
<td>Watercress</td>
</tr>
<tr>
<td>Hawkbit</td>
<td>Watermelon</td>
</tr>
<tr>
<td>Hawkweed</td>
<td>Wheat</td>
</tr>
<tr>
<td>Heather</td>
<td>Yarrow</td>
</tr>
<tr>
<td>Hedge parsley</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAFE Twigs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>Apple</td>
</tr>
<tr>
<td>Birch</td>
<td>Birch</td>
</tr>
<tr>
<td>Blackberry</td>
<td>Blackberry</td>
</tr>
<tr>
<td>Fir</td>
<td>Fir</td>
</tr>
<tr>
<td>Hazel</td>
<td>Hazel</td>
</tr>
<tr>
<td>Hawthorn</td>
<td>Hawthorn</td>
</tr>
<tr>
<td>Maple</td>
<td>Maple</td>
</tr>
<tr>
<td>Pear</td>
<td>Pear</td>
</tr>
<tr>
<td>Raspberry</td>
<td>Raspberry</td>
</tr>
<tr>
<td>Spruce</td>
<td>Spruce</td>
</tr>
<tr>
<td>Willow</td>
<td>Willow</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAFE Flowers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aster</td>
<td>Aster</td>
</tr>
<tr>
<td>Carnation</td>
<td>Carnation</td>
</tr>
<tr>
<td>Daisy</td>
<td>Daisy</td>
</tr>
<tr>
<td>Geranium</td>
<td>Geranium</td>
</tr>
<tr>
<td>Geum</td>
<td>Geum</td>
</tr>
<tr>
<td>Helium</td>
<td>Helium</td>
</tr>
<tr>
<td>Hollyhock</td>
<td>Hollyhock</td>
</tr>
<tr>
<td>Honesty</td>
<td>Honesty</td>
</tr>
<tr>
<td>Marguerite</td>
<td>Marguerite</td>
</tr>
<tr>
<td>Marigold</td>
<td>Marigold</td>
</tr>
<tr>
<td>Michaelmas daisy</td>
<td>Michaelmas daisy</td>
</tr>
<tr>
<td>Nasturtium</td>
<td>Nasturtium</td>
</tr>
<tr>
<td>Rose</td>
<td>Rose</td>
</tr>
<tr>
<td>Stock</td>
<td>Stock</td>
</tr>
<tr>
<td>Sunflower</td>
<td>Sunflower</td>
</tr>
<tr>
<td>Wallflower</td>
<td>Wallflower</td>
</tr>
<tr>
<td>Safe in Moderation</td>
<td>Mustard greens</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Brussels sprouts</td>
<td>Groundsel</td>
</tr>
<tr>
<td>Cabbage</td>
<td>Kale</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>Lettuce</td>
</tr>
<tr>
<td>Corn</td>
<td>Molasses</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOT Safe to Eat</th>
<th>UNSAFE Twigs</th>
<th>UNSAFE Flowers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arum</td>
<td>Acacia</td>
<td>Acanthus</td>
</tr>
<tr>
<td>Bigwort</td>
<td>Apricot</td>
<td>Antirrhinum</td>
</tr>
<tr>
<td>Bindweed</td>
<td>Azalea</td>
<td>Anemone</td>
</tr>
<tr>
<td>Bluebell</td>
<td>Beech</td>
<td>Brugmansia</td>
</tr>
<tr>
<td>Bryony</td>
<td>Box</td>
<td>Columbine</td>
</tr>
<tr>
<td>Buttercup</td>
<td>Cherry</td>
<td>Crocus</td>
</tr>
<tr>
<td>Celandine</td>
<td>Clematis</td>
<td>Daffodil</td>
</tr>
<tr>
<td>Chocolate</td>
<td>Elder</td>
<td>Dahlia</td>
</tr>
<tr>
<td>Clover RED</td>
<td>Holly</td>
<td>Delphinium</td>
</tr>
<tr>
<td>Colchicum</td>
<td>Ivy</td>
<td>Feverfew</td>
</tr>
<tr>
<td>Corncockle</td>
<td>Laburnum</td>
<td>Gypsophila</td>
</tr>
<tr>
<td>Cowslip</td>
<td>Mistletoe</td>
<td>Hellebore</td>
</tr>
<tr>
<td>Cuckoo pint</td>
<td>Nux vomica</td>
<td>Hyacinth</td>
</tr>
<tr>
<td>Dog's Mercury</td>
<td>Oak</td>
<td>Iris</td>
</tr>
<tr>
<td>Elder after flowering</td>
<td>Oleander</td>
<td>Larkspur</td>
</tr>
<tr>
<td>Euphorbia</td>
<td>Peach</td>
<td>Lily of the Valley</td>
</tr>
<tr>
<td>Evergreens</td>
<td>Periwinkle</td>
<td>Lobelia</td>
</tr>
<tr>
<td>Fool's parsley</td>
<td>Plum</td>
<td>Love-in-a-mist</td>
</tr>
<tr>
<td>Foxglove</td>
<td>Privet</td>
<td>Lupin</td>
</tr>
<tr>
<td>Ground ivy</td>
<td>Rhododendron</td>
<td>Narcissus</td>
</tr>
<tr>
<td>Hemlock</td>
<td>Rosewood</td>
<td>Poppy</td>
</tr>
<tr>
<td>Henbane</td>
<td>Snowberry</td>
<td>Primrose</td>
</tr>
<tr>
<td>Kingcup</td>
<td>Spindleberry</td>
<td>Snowdrop</td>
</tr>
<tr>
<td>Meadow Saffron</td>
<td>Thorn apple</td>
<td>Tulip</td>
</tr>
<tr>
<td>Milkweed</td>
<td>Waxplant</td>
<td></td>
</tr>
<tr>
<td>Nightshade</td>
<td>Wisteria</td>
<td></td>
</tr>
<tr>
<td>Ragwort</td>
<td>Yew</td>
<td></td>
</tr>
<tr>
<td>Scarlet Pimpernel</td>
<td>All evergreens NOT in safe twig list</td>
<td></td>
</tr>
<tr>
<td>Spurge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toadflax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tomato leaves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traveller's joy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peach leaves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plum leaves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potato SPROUTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhubarb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood sorrel</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional foods can be found in the Appendix (page 73-81).
How Much to Feed

The amount of feed pellets, hay and other foods necessary to keep your rabbits satisfied and healthy is not set in stone and may vary from breed to breed, or even rabbit to rabbit. It will be up to you to discern if your rabbits are getting overweight or if they need more rations added to their daily intake. If you want to feed less pellets, you will need to feed more vegetables so you keep the nutritional intake balanced without increasing calories. Active, growing and producing rabbits need about 1100 calories a day. A doe and her litter will eat 100–120 lb. of feed during an 8-week period. A variety of hay and straw must also be encouraged all day long (i.e. replenish available hay a few times a day) so that your rabbits get all the fiber and roughage needed.

If your rabbit is leaving a lot of food behind from one feeding to the next, cut back on feed. If your rabbit seems to be hungry all the time, give it more. But remember, overfeeding can lead to poorly producing rabbits, especially does. The fat buildup in does leads to breeding complications and makes kindling more difficult. If you notice a sudden loss of appetite or disinterest in food, it could be a sign of health problems.

The easiest way to tell if you are giving your rabbit the right amount of food is to stroke its backbone regularly. If the ridges of the backbone feel pointed and sharp, increase the food offering. If the ridge is present but feels rounded, your rabbit is receiving the right amount of food. If you can’t feel the backbone, decrease your rabbit’s intake. A quick weekly check while you are inspecting feet and other parts is recommended.

Generally, pregnant does, lactating does with litters and growing fryers (1-3 months old) can be fed as much as they will eat (until they begin leaving food behind). This should be about 12-16 oz. for 3-5 days following kindling and will increase as the doe produces more meat and the litter puts on weight.

Replacement rabbits and bucks being used for breeding should be fed about 6-8 ounces of pellets a day. Dry does and bucks which are no longer reproducing have lighter needs of about 4-6 ounces a day.

Based on a pelleted feed, the following figures represent approximate amounts of feed which would be required to run your rabbitry. Prevent wastage by feeding according to the rabbits’ needs.

- Eight pounds of feed is needed for each pregnant doe through 31 days gestation.
- A doe and a litter of 8 kits eat approximately 104-108 lb of feed to produce market-size fryers.
- Each 2.7 pounds you feed a 4-8 week old kit produces 1 pound of meat.
- Forty pounds of feed will provide for a buck or doe from birth to breeding age (4-6 months).
- Thirteen pounds of feed will produce 4 pounds of meat on a doe, buck or fryer.
Producing Your Own Feed – Is It A Viable Option?

If you’ve got the time, space and interest, making your own organic feed is not impossible. Growing supplements such as soybeans, comfrey, apples and greens are fairly easy, but the grains and hay required may be a bit more problematic. You will not only need the space to grow the crops but also the time to hand sow and harvest everything (unless you’re growing for more than just your rabbits.) Unfortunately if you are serious about feeding your rabbit organically and want to know exactly where food elements are coming from, growing the grains and hay yourself or finding a local farmer to sell it to you are the only options. Of course, buying the grains from someone else may be more expensive than growing your own but it would certainly save you a lot of time and space.

If you choose homegrown feed, hay racks are essential for each cage to keep the hay off the ground and prevent it from being soiled. Two wooden hutches can often be arranged to share a rack which will save you a considerable amount of time when feeding. Also if you already have your rabbits on pellets and decide to switch to grains, hay and other “wet” foods, make the transition slowly to avoid dysentery or bloat (which can be fatal, especially in young bunnies.) Slowly decrease the amount of pellets and add a bit more of the “wet” items each day. It should take about 2 weeks for the switch. In addition, if your rabbits are not familiar with certain fruits or vegetables, you will want to introduce new items slowly and singularly. This way if an allergy develops you can identify the problem food.

Suitable grains that you might use are wheat, oats, corn, barley, milo or other grain sorghums. Cereal grains can be fed whole, corn should be cracked and oats and barley need to be rolled. If you use ground feed, moisten it before you feed it to your rabbits to eliminate dust. About 7 pounds of dehydrated alfalfa pellets will replace the nutrition provided by 10 pounds of good quality alfalfa hay.

Unfortunately, grains alone will not provide all the nutrients needed to grow a well producing stock. Protein is a large issue and is why many people settle for pellets with a green diet and hay on the side. Dry does and bucks only need about 12 percent protein in their diet for maintenance, but pregnant does and does with litters need around 17 percent protein. Assuming corn contains 9 percent, oats 11-12 percent and alfalfa hay 15 percent, you still have some ground to cover before 17 percent is met. Soybeans are a great source of protein and can be grown fairly easily anywhere that corn and cotton grow. But you will have to grind them into meal because whole soybeans (like other beans and legumes) are not palatable to rabbits. They’ll eat about one pound of soybeans to 10 pounds of other grains.

Fresh greens can be fed in reasonable quantities - but not more than the rabbit will eat in 15 to 20 minutes. Just remember that your rabbits may choose to go for the less protein-rich greens before the hay and grains just like a kid will choose candy over liver any day. Be careful with lettuce, chard, kale and especially cabbage because large amounts can cause digestive problems. They also enjoy root crops such as potatoes, mangel beets and Jerusalem artichokes. You will
even find them devouring many of the herbs from your garden (comfrey, sage, dill, marjoram) and they like pumpkins and melons too.

See the safe and unsafe food cheat sheets for rabbits on pages 41-42 of this ebook or the Appendix for a more complete list of less common foods (pages 73-81).

Rabbits will enjoy slices of apples and pears, and you can even feed them some of the leaves and pruned branches from your fruit trees too. Maple, willow, and similar branches also make good chewing. The branches give the rabbit something to chew on besides their hutch and will keep their teeth worn down.

**Vitamins** A, D & E are important for rabbits. Providing root crops like carrots and good quality hay will keep your rabbits vitamin A levels high. Disease and stress may increase the daily vitamin requirements. Be sure to store food properly to minimize the loss of minerals, vitamins and nutrients. Levels of vitamin A in the diet must be >5,000 IU/kg and <75,000 IU/kg. Levels out of this range may cause abortion, resorbed litters, and fetal hydrocephalus. Diets containing ≥30% of alfalfa meal generally provide sufficient vitamin A. Field-cured alfalfa is also a good source of vitamin D. Most grains contain vitamin E in sufficient quantities, especially wheat. Vitamin E deficiency has been associated with infertility, muscular dystrophy, and fetal and neonatal death.

Rabbits habitually practice coprophagy, sometimes referred to as pseudorumination. This refers to the production of two kinds of fecal matter, one hard and one soft, the latter consumed directly from the anus as it is excreted. This practice begins in rabbits shortly after they begin eating solid feed at about 3 to 4 weeks of age, but it is not practiced by germ-free rabbits. Fermentation in the large intestine and the practice of coprophagy probably provide the necessary amounts of most B vitamins, provide some bacterially synthesized protein, and permit further digestion of some nutrients by multiple passage through the digestive tract. The high digestibility of forage protein in rabbits may be due partially to coprophagy. You may not notice the process, though, because the rabbit reingests its smaller, soft, mucous-covered pellets (versus the large firm pellets you see them excrete during the day) directly from the anus. You will often find the intact pellets in the front part of stomach when you butcher them.

If you select a diet of scraps, hay and your own grains mix, you will need to get some salt spools to put in each cage. Commercial feed pellets have plenty of salt in them already so you don't need the spools.
Creating Your Own Rabbit Feed

These are the recommended guidelines from the U.S. Department of Agriculture for rabbits in various life stages:

<table>
<thead>
<tr>
<th></th>
<th>Dry does, herd bucks &amp; developing young</th>
<th>Pregnant does &amp; does with litters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein</td>
<td>12-15%</td>
<td>16-20%</td>
</tr>
<tr>
<td>Fat</td>
<td>2-3.5%</td>
<td>3-5.5%</td>
</tr>
<tr>
<td>Fiber</td>
<td>20-27%</td>
<td>14-20%</td>
</tr>
<tr>
<td>Nitrogen-free extract</td>
<td>43-47%</td>
<td>44-50%</td>
</tr>
<tr>
<td>Ash or mineral</td>
<td>5-6.5%</td>
<td>4.5-6.5%</td>
</tr>
</tbody>
</table>

Protein is, without a doubt, the most important and expensive part of a commercial rabbit’s diet. There’s no danger of overfeeding protein, but more a risk of feeding too little, causing your rabbits to slow in growth. This is especially true for young rabbits. A rabbit doubles its weight in its first week of life and increases its birth weight 28 times by the day it’s weaned. Because protein is what causes rabbits to grow, large amounts are needed to provide for rapid weight gain.

The protein content of the grains, hay, oats and other supplements may differ based on where, when and how they are grown. A lot of the quality will depend on the soil itself. These feed rations are constructed using averages and you may find that you need to make adjustments for your rabbits as time passes and according to what grows best for you.

Average Crude Protein Values %

- Barley: 12-25
- Grain Sorghum / Milo: 10-12
- Hay - Alfalfa: 13-22
- Hay - Lespedeza: 11-12
- Hay - Pea: 12-18
- Hay - Red Clover: 11-15
- Hay - Timothy: 9-9.5
- Hay - Sudan Grass: 8-20
- Hay - Prairie Grass: 6-8
- Oats: 11-20
- Soybeans: 12-16
- Wheat: 10-20
Example Ration Recipes

Using average protein values, you can construct a home-grown feed of grains, hay, oats, corn and soybeans. Grind up and moisten the mixture before feeding it to your rabbits.

The following is an example of a complete mix with about 20% protein. It would be suitable for your pregnant and lactating does. It makes 100 pounds of feed.

- 44% protein soybean meal: 18 pounds
- 28% protein linseed meal: 4 pounds
- 15% alfalfa meal: 40 pounds
- Wheat bran: 15 pounds
- Ground milo, barley, or corn: 18.5 pounds
- Ground oats: 4 pounds
- Salt: 0.5 pounds

With the following base mixes, you can create additional mixes which are more suitable to what you have the ability to grow or purchase. The following examples can be built on to include additional protein and other nutrients needed to make a balanced diet.

Base mixes for dry does, herd bucks, and developing young:

**Base Mix 1 (12% protein)**
- Whole barley, oats or wheat: 35 pounds
- Alfalfa, clover, lespedeza, or pea hay: 64.5 pounds
- Salt: 0.5 pounds

**Base Mix 2 (15% protein)**
- Whole barley, oats or wheat: 45 pounds
- Soybean, peanut or linseed pellets/peasize cake (38-43% protein): 15 pounds
- Timothy, prairie or sudan hay: 39.5 pounds
- Salt: 0.5 pounds

**Base Mix 3 (14% protein)**
- Whole oats or wheat: 30 pounds
- Whole barley, milo or other grain sorghum: 15 pounds
- Alfalfa, red clover, lespedeza, or pea hay: 69.5 pounds
- Salt: 0.5 pounds
Base mixes for pregnant and nursing does:

**Base Mix 1 (16% protein)**
- Whole barley, oats or wheat: 35 pounds
- Soybean, peanut or linseed pellets/peasize cake (38-43% protein): 15 pounds
- Alfalfa, red clover, lespedeza, or pea hay: 49.5 pounds
- Salt: 0.5 pounds

**Base Mix 2 (18% protein)**
- Whole barley, oats or wheat: 45 pounds
- Soybean, peanut or linseed pellets/peasize cake (38-43% protein): 25 pounds
- Timothy, prairie or sudan hay: 29.5 pounds
- Salt: 0.5 pounds

**Base Mix 3 (18% protein)**
- Whole oats or wheat: 15 pounds
- Whole barley, milo or other grain sorghum: 15 pounds
- Soybean, peanut or linseed pellets/peasize cake (38-43% protein): 20 pounds
- Alfalfa, red clover, lespedeza, or pea hay: 49.5 pounds
- Salt: 0.5 pounds
Mating & Reproduction

Mating Basics

Medium breed rabbits (5 to 9 lbs (2.3-4.1 kg) as adults) reach maturity when they are 4-5 months old; large breeds (10 to 12 lbs (4.5-5.5 kg) as adults) when they are 6-7 months old. Giants breeds will mature at about 6-9 months of age and small breeds when 3-5 months old. This is generally when it becomes acceptable to breed your rabbits.

But you should not wait too long before a doe’s first litter, or between litters. After a rabbit reaches about 1 year old, the fat around the ovaries begins to store up, making mating harder. Carefully watching the diet to prevent fat buildup can help but there is a risk that rabbits which have gone too long without a litter may die after conception. When the rabbit becomes pregnant, the fat around the ovaries begins to break down and creates a toxic substance called ketones. As the pregnancy progresses, more ketones are produced which may kill the rabbit. So as your does come into season for the first time, you will want to consider taking advantage of the event by having your first breeding.

The bloodline of your bunnies should be carefully considered. The parents should be in excellent health and never breed brothers to sisters. You also want to breed does and bucks of approximately the same age to prevent disease spread (i.e. young doe to young buck, old doe to old buck.) If you must replace an old buck for some reason, the new buck you use should not be bred again with new does afterward. (Hence the importance of keeping good records since you certainly won’t be able to remember all these matings.)

In you choose to inbreed rabbits (father to daughter, brother to sister, etc) remember that you will essentially be cloning the rabbits. While this is great when your rabbits are healthy, strong and display everything you want, if they have any unfavorable characteristics (don’t breed well in the winter, tend to get sore hocks, etc) those traits will also be passed along.

Bucks, like does, can be started at about 6 months old for medium breeds. When starting out a new buck, don’t use him more than twice a week for the first couple months. After two months you can mate him every three days. More often than that is possible but it will result in lower quality and quantity of kits.
How to Mate Rabbits

When your doe is ready to mate, she will begin to show signs of nervousness or restlessness and she will probably begin rubbing her chin on things within her cage. If you think your rabbits are ready to mate, flip the doe over and look at her vulva. If the coloring is red or purple and it is moist, she should be ready. If it’s pink and mostly dry, she is not. But even if her vulva is red or purple, the doe may still refuse to mate.

Breeding in the morning is most successful, and if the doe’s nest box is closed off, breed the doe before allowing suckling. Prolactin levels spike from 3-7pm as well as during and after suckling. Prolactin has a negative effect on receptivity.

To mate the rabbits, put the doe into the buck’s cage and allow them to mate twice. They know what the meeting is for and will usually get down to business in just a few minutes. If the doe rejects the buck and won’t allow him to mate with her, take her out and try again a few days later. You can also try her with another buck. Never bring the buck to the doe’s cage because she will attack him, trying to defend her territory. If a doe or buck consistently gives a mating problem, eliminate it from the herd. A good conception rate is 90% or better. Give young does about two litters to prove their mother instinct and litter size before deciding to cull or keep.

Once the buck has ejaculated, he will let out a shriek and/or fall onto his side, exhausted. His semen is sent deep inside the doe and a mucous plug forms to keep it from running back out. The doe only releases eggs about 10 hours after sexual stimulation and sometimes sperm does not survive this long. That is why many breeders put the rabbits together again 8-12 hours later to ensure fertilization. Instead, we recommend bringing the doe back for a second mating after about one hour, keeping everything within one round of intercourse.

You can leave the doe with the buck for the time it takes to write up the breeding record or return her immediately to her cage but do not leave them together unattended. Sometimes after mating, the buck will develop a mean streak and start biting the doe.

Do not forget to record the mating information in your breeding records, whatever they might be. Accurate records will tell you when your doe is due so you can put the nesting box in at the right time and allow you to keep track of the pedigrees so you keep your breeding lines clean.

A buck and doe remain profitable for about two years if fed and managed properly. Their usefulness must be based on results rather than age.

Some studies have found that at least 14 hours of light daily is beneficial for conception. During the winter, you can use artificial lights when daylight hours are less than 14 hours. A 40-watt bulb every 10 feet works satisfactorily. Use a time clock for ease and accuracy.

When a doe loses all her litter at kindling, rebreed three days later. If she loses all her litter after several days, rebreed immediately.
**Cyclic Breeding System**

This system is a simple and convenient way to keep track of buck and doe matings and prevent undue in-breeding, especially if you have quite a few breeding rabbits. Group does into sections within your rabbitry. Each section is made up of nine hutches, with eight containing one doe each and one containing the buck. The sections are lettered A,B,C,D, etc. Tattoo the bucks or otherwise identify them with small letters a, b, c, d, etc.

The bucks and does should usually not be closely related. Have an additional replacement bucks for every 10 does. Any replacement buck during the first year is automatically assigned the letter of the buck he replaces, and the breeding cycle is continued as diagrammed.

The first year the does in section A are bred to buck a; does in section B to buck b, etc. The second year the does in section A are bred to buck f; does in section B, to buck a, etc. Only the bucks are rotated annually; the does stay where they are. It takes six years to complete the cycle. This system should reduce problems with inbreeding.

Replace does in section A with replacement offspring selected from section A does. Section B replacement does should come from section B, etc.

<table>
<thead>
<tr>
<th>Sections</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Year Bucks</td>
<td>a</td>
<td>b</td>
<td>C</td>
<td>d</td>
</tr>
<tr>
<td>2nd Year Bucks</td>
<td>d</td>
<td>a</td>
<td>B</td>
<td>c</td>
</tr>
<tr>
<td>3rd Year Bucks</td>
<td>c</td>
<td>d</td>
<td>A</td>
<td>b</td>
</tr>
<tr>
<td>4th Year Bucks</td>
<td>b</td>
<td>c</td>
<td>D</td>
<td>a</td>
</tr>
</tbody>
</table>

If you replace a buck with your own stock, then the following procedure works satisfactorily. When replacing a buck (a) his replacement is selected from offspring of section A does. If replacing buck (b), select his replacement from offspring of section B does. The replacement buck is always assigned the letter of the buck he is replacing. Always select replacement stock based on desirable characteristics such as good livability, fast weight gain, and parents with good conception, large litters, etc.
Gestation and Kindling

The gestation period of a rabbit is 31 days so you should have bunnies arriving within a few days of the rabbit's due date. Rabbits are usually nocturnal so they tend to have their babies at night. The doe will usually do most of the work during this process but you need to ensure that your doe has had a successful mating and check on the kits after birth to make sure they are healthy and being taken care of.

Is She Pregnant? Palpating a Doe

About twelve days after mating, you can flip the doe over and should be able to feel babies about the size of marbles. This is called palpating. Nonpregnant does are re-bred immediately. This procedure saves waiting the additional 17 days to see if the doe is pregnant.

The object is to feel the developing embryos in the horns of the doe's uterus. The two horns hold the embryos so they feel like chains of marbles on each side of the midline of the abdomen. If you wait longer than 14 days, the task is more difficult and almost impossible. Position the doe lying relaxed, feet down, facing you. Always do this check with clean hands (the bunnies will soon be nursing here and you don't want to contaminate anything) and never check a bunny on the 13th or 23rd day after breeding due to placental changes. Does that have been handled often are much easier to palpate. Do not attempt palpation unless the doe is calm or you may damage the embryos. With a little practice, you will learn to determine pregnancy even earlier than 14 days.

Grasp the ears and a fold of skin from the shoulders with one hand. Place your other hand under the body between the hind legs and just in front of the pelvis. Place your thumb on one side and forefinger on the other side of the uterine horns. Be careful not to apply a lot of pressure; just slide your fingers along, and the embryos should slide gently between the thumb and forefinger.

Getting Ready to Give Birth

About 3 days before the doe is ready to kindle (give birth), put a nesting box in her cage (discussed in the supplies section) and fill it with clean, dry hay, straw, shredded newspaper or cardboard. In colder weather, the box should be full of nesting material so the doe can dig into it and hunker down. There should be about an inch of material on the sides and bottom of the nest and bunnies should be covered with fur to keep them warm since they don't have their own fur initially.

Shortly before birth, the doe will begin arranging the bedding in the nesting box and pull fur out of her belly. This not only will keep the bunnies warmer in the nest but will expose her nipples for suckling when the kits arrive. The doe may even pull another rabbit's fur out or need you to pull her fur if she doesn't do it herself. You can also save some of the pulled fur for later births in case your doe does not pull her own.
Rabbits are generally nocturnal and usually have their babies at night. As your doe’s due date approaches, she may seem more nervous than usual and it’s a good idea to keep anything that causes unnecessary stress or noise away from her, including other animals. The doe may also begin to eat less a day or two before she gives birth.

The gestation period is ~31-33 days. Does with a small litter (usually ≤4) seem to have a longer gestation period than does that produce larger litters. If a doe has not kindled by day 32 of gestation, oxytocin (1-2 IU) should be given to induce parturition; otherwise, a dead litter is almost always delivered sometime after day 34. Occasionally, pregnant does abort or resorb the fetuses due to nutritional deficiencies or disease.

You’ve Got Bunnies – Now What?

Once the bunnies have arrived, you should find 6-10 kits in the nest box. Inspect the litter to make sure all of them are alive (remove any dead bunnies to prevent the doe from eating them) and take a weight measurement of all the bunnies together. Wear gloves when you do this to keep your scent off of them and you may want to distract the doe with some sort of treat. At birth, seven pups should weigh about 1 pound (454 g), at three weeks at least 4.9 pounds (320 g) each and at eight weeks 4 pounds (1.8 kg) each.

When handling kits, they should be picked up by placing the whole hand, gently, over the kit and curling the fingers around it. Care should be taken not to squeeze the kit as they are very fragile and it is very easy to damage them.

Make sure all the babies are laying on the bedding, staying warm. If they should end up on the wire floor of your nesting box or cage, you may need to hold them against your skin to warm them. Also watch outside the nest for bunnies that need to be put back inside. Sometimes they are still attached to the doe when she jumps out and are too small to get back in by themselves.

About 10 days after birth, the rabbits will begin to open their eyes. If their eyes have a hard crust holding them shut, use a cotton swab and human eye drops (Visine, Murine, etc) to remove the crust. Then using your fingers you can you can gently separate the lids. You will usually only have to do this once because the crust generally does not reform.

After the bunnies are about 3 weeks old, they will begin to leave the nest box and eat solid food. You can remove the nest box now because allowing them to live in it longer only gives you more to clean. As mentioned in the equipment section, the nest box should first be cleaned when the bunnies are 2 weeks old and again once a week for each week that the box is in the cage. So if you remove the box at 3 weeks old, you will only be cleaning it twice; at 4 weeks, clean it 3 times, etc.
Rebreeding & Weaning

The mother rabbit can be rebred as early as 4-5 weeks after giving birth but waiting until the bunnies are at least 6-7 weeks old will allow the doe to have some quiet time between litters. Breeding the doe eight weeks after each kindling would give you four litters a year which is what we suggest in our breeding schedule for a family of four. More than five litters a year is not recommended because it puts a lot of stress on the rabbit, shortening the life span and otherwise damaging its health.

The young can be weaned anywhere between 4-8 weeks old, but the longer they stay with the mother, the better. Usually kits will start to eat greens at about 15-18 days old. If they are still suckling on the mother doe, they are bulking up without consuming any food themselves which saves you money on feed. Many breeders wean the bunnies at about eight weeks but it is important not to remove all the bunnies at once so the doe’s milk can dry up gradually. Caked mammary glands or mastitis may develop otherwise; especially if the doe is a high milk producer.

Gradual weaning does not involve any decrease in feed until all weaning is complete. Wean the larger kits first, thus giving any smaller ones time to catch up to the rest of the litter.

<table>
<thead>
<tr>
<th>Example Weaning Schedule (showing Number of Kits Weaned)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Litter Size</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>11</td>
</tr>
<tr>
<td>12</td>
</tr>
</tbody>
</table>

Litter sizes greater than nine kits may be weaned over five or six days if desired.

It is important to start dropping a few feed pellets into the nest box beginning at about day 15 of lactation so that the young can start to nibble on the does’ feed. This provides the function of creep feeding without the use of special equipment. The pups need to be feeding several days BEFORE they are leaving the nest on their own.
Selecting Replacements & Fryers

At this stage, you must decide whether you will butcher the rabbits now, continue to fatten them a bit and then butcher them, or keep them for breeding. If you will be hanging on to them for a while (and remember this is going to cost you in feed), you can put all the weaned bunnies in one cage.

By 3 months of age, all growing stock should be separated by sex into cages containing no more than 2 rabbits. Sex can be determined by depressing the external genitalia to reveal a slit-like vulva in females and penis in males. The testicles descend at 10-12 wk.

At 5 months old, the animals should be separated into individual cages. Permanent tattoo markings should be placed in the left ear of the rabbit at 8 weeks of age for ID purposes should it escape, and to help you identify rabbits so breeding records remain correct. The right ear should be reserved for any rabbits that may be shown as the American Rabbit Breeders Association places their markings in the right.

How to Select Replacement Breeding Stock

Selecting replacement rabbits for breeding should be done with genetics and the betterment of your rabbitry in mind.

- Select rabbits from a good line of genealogy (healthy, good producing buck/doe/daughter does, high milk production, etc). A doe is considered a good producer with 35 or more kits per year and an excellent producer with 48 or more.
- Select does from parent does whose first litter had 10 kits successfully raised to three weeks old. This will help ensure that future litters remain large and healthy long into the rabbit’s life.
- Select rabbits (especially bucks) which weigh at least 5 pounds by the time they are 70 days old.
- If possible, save rabbits from a large litter (8-10 kits) which have approximately the same size at 8-10 weeks old.
- Avoid rabbits with any sort of health problems (bad teeth, snuffles, crooked bones or tail, ruptures, abscesses, respiratory disease symptoms, etc).
- Family traits, such as uneven growth, color aberrations, sore hocks, poor disposition, or lack of fertility, should be eliminated to reduce herd management problems.

Replacements of medium breed rabbits will need to be selected at least three months before you need them and large breeds at least four months. Remember, medium breed rabbits reach sexual maturity when they are 5-6 months old, large breeds when they are 6-7 months old. A lot could happen in that span of time so you generally should keep more rabbits than you will need in case something goes wrong. If you find you don’t need the rabbit after all, you can always sell it to another breeder. You’ll be improving the gene pool and continuing a very good line of rabbits this way instead of selling off a rabbit you would generally only consider as a fryer.
Culling Undesirables from the Herd

In addition to selecting rabbits for replacement breeders, you may also need to *cull some of your current breeders because they are not producing* as well as they should. Performing a census every November will help you recognize the poor performers and allow you to plan their replacement. Your production cycle should start each January, breeding good does with good bucks for plenty of February births. From this litter you can select replacements to be bred in mid-July providing you with fryers that are ready at the start of October.

Some examples of rabbits you may want to cull include:

- Hard to breed does – if you need many attempts to mate her or she frequently resists the buck, cull her. This is an inheritable trait which will only weigh down your rabbitry. Most noticeable in the fall and during bad weather.
- Does with misses or which alternate between a litter and a miss – litters should be uniform with good weights at 3 and 8 week checks.
- Does which only breed during the summer – rabbits born in the winter were bred from rabbits which can breed during the winter, ensuring year round meat production. Breeding only from summer-born rabbits may create smaller litter size, rabbits which are intolerant to the cold or no litters at all.
- Rabbits with bad temperament – It occasionally happens that a rabbit becomes vicious and attacks those who attempt to handle it. A doe may become very aggressive when she has young - this is a natural instinct and should be respected. Bucks can also become aggressive for no obvious reason. However, aggression is nearly always as a result of bad handling or teasing. It can also be the result of lack of water - so make sure that water is always available.
  
  There are instances where a rabbit may become aggressive for none of the above reasons. If this behavior becomes habitual, culling should be considered. A rabbit has the ability to open its mouth very wide, their teeth are very sharp and their bites are deep and painful.
Reproduction Problems

False Pregnancy

Sometimes a doe will go through a ‘pseudopregnancy’ (false pregnancy,) appearing or acting pregnant when she is not. This could happen when a young doe is kept too close to bucks, she becomes sexually stimulated, she is mounted by does or if she has an infertile mating with a buck. The pseudopregnancy lasts 15-17 days, during which time she will not ovulate. But after the seventeen days, her fertility will be at its highest so she should be bred again then. To prevent this from happening, keep young does you are planning to breed separated from each other for three weeks before mating. After giving birth to her first litter, the doe is less likely to have another false pregnancy.

About 18-20 days after stimulation, the doe may pull fur and attempt to make a nest, but she will not keep it clean. This is a sign of false pregnancy and is a good time to breed her properly.

Abortion or Cannibalism

Cannibalism and abortion are common problems. The causes are many and mostly undependable. These are some of the causes:

1. First-litter does are usually extremely nervous. Give them one more chance and then cull if cannibalism recurs.
2. Unbalanced diet
3. Lack of water
4. Unusual noises can cause the doe to injure the young and can result in cannibalism.
5. Strange dogs, predators, or people can cause the doe to stamp her feet and mash the young.
6. Moving nest box after young are kindled.
7. Shallow nest box makes the does feel insecure and she is easily disturbed.

Doe Cannot or Will Not Nurse

If something goes wrong while your doe is kindling, she may die and leave you searching for a foster parent. If you have another doe which has kindled on the same day, you may be able to use her as a foster mother.

Most medium-sized female rabbits have 8-10 nipples, and many kindle 12-15 young. If a doe is unable to nurse all the kits effectively, kits may be fostered by removing them from the nest box during the first 3 days and giving them to a doe of about the same age with a smaller litter. If the fostered kits are mixed with the doe’s own kits and covered with hair of the doe, they are generally accepted. Moving the larger kits to the new litter instead of the smaller kits increases the chance of success. Does nurse only 1-
2 times daily and the kits actually nurse less than three minutes at a time before they are full.

Before putting the kits in the nest, you can also rub the doe’s nose with vanilla. Most of the time she will not notice the new additions but there is a possibility that she will try to kill the bunnies or refuse to feed them. If this happens, take the kits out immediately and feed them by hand. They can be fed kitten or puppy milk or you can mix up your own mother rabbit’s milk with the recipes below. Unfortunately, the mortality rate is quite high. Remember to keep the kits warm, dry and in a quiet location.

Slowly feed the babies with a pet nurser bottle, a feeding syringe or an eyedropper. They usually eat about 5-7ccs every 3 hours. Be sure to feed them extremely slowly because the babies may inhale the fluid into the lungs, causing death.

After the feeding, you’ll need to massage the lower abdomen of each bunny with a warm, moist washcloth to stimulate urination and defecation.

Kits will start eating greens starting at days 15-18.

<table>
<thead>
<tr>
<th>Rabbit Milk Formula #1</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 1 pint skim milk</td>
</tr>
<tr>
<td>• 2 egg yolks</td>
</tr>
<tr>
<td>• 2 tablespoons Karo syrup</td>
</tr>
<tr>
<td>• 1 tablespoon bone meal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rabbit Milk Formula #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 1 can of sweetened condensed milk or fresh goat’s milk (don’t use cow’s milk)</td>
</tr>
<tr>
<td>• 3 tablespoons heavy cream</td>
</tr>
<tr>
<td>• 3 tablespoons Karo corn syrup</td>
</tr>
<tr>
<td>• 1 egg yolk</td>
</tr>
</tbody>
</table>

Combine ingredients of either recipe above in a plastic bowl. Warm in microwave (30 sec – 1 min intervals, depending on microwave power) and heat mixture until it’s slightly above room temperature. Test it to make sure it is not too hot by putting a few drops of the formula on your wrist first.
Culling, Dressing and Preparing

Dispatching the Rabbit

The task of killing your rabbits is likely to be your least favorite part of raising them. Although one may become more accustomed to doing it and find ways to make the process easier and quicker over the years, most breeders still never actually look forward to butchering. You may be able to find a local butcher or neighbor to do the task for you but the expenses will start climbing quickly if you’re butchering a few rabbits a week to sell as meat. Cleaning the carcass and removing the fur are not complicated tasks, but dispatching the rabbit usually requires some practice.

If you have the ability to watch someone else butcher and clean a rabbit first, do it. The best way to learn how to perform the procedures properly and efficiently is to watch someone with lots of experience who knows exactly what they are doing. There are several ways to kill a rabbit but doing it quickly and humanely so that both you and the animal will have as little stress as possible is the key. Slaughter the rabbits in a clean, sanitary area. Check your local health agency for any regulations or restrictions you need to follow.

Before butchering you may want to withhold food from the rabbit for 24 hours. This will start cleaning out the digestive system but because rabbits practice cophrophagy (stool eating) their system will not be entirely clear.

**Shooting your rabbit with a .22 caliber weapon is one alternative.** A hand gun will work for small bunnies but use a rifle if you're going to eliminate an adult rabbit. An air rifle isn't recommended - do you want to have to shoot the animal multiple times if you don't succeed? If you are raising rabbits in the city, this option is probably not for you. Some places may have laws about discharging your weapon so check them first to make sure you don't end up with the authorities at your house. Put the rabbit in a small box or pen on a grassy or earthen area of the yard (watch out for rocks which could cause a ricochet), away from the other rabbits (you don't need to stress them out by seeing or hearing this.) Give the rabbit something to eat or a treat to keep his head still. Shoot it from above and behind, directly on top of the crown, or between the ears. Point the shot toward the tip of the nose, aiming at the junction of spine and skull. Keep the gun muzzle close to the rabbit’s head but no closer than an inch away to allow gasses to escape from the barrel. Avoid a shot between the eyes: the rabbit is more likely to move, causing a miss. This method may produce a bit more blood or mess than some others but it will cause immediate brain death, making it painless and stress-free.

**Most people hit the rabbit on the back of the head with a bat or similar object to dispatch it.** Hold the rabbit with its head down on a table or the floor, one hand at the small of its back. Stun and kill the rabbit with a heavy blow from a hammer or 3/8” metal rod at the base of the skull. You have to do it hard to ensure that you kill the rabbit. The rabbit will usually stiffen and kick for several seconds after death. This is just a residual reflex and doesn’t mean the rabbit is conscious or in pain. Use a stuffed toy bunny to practice where to strike and your aim since you don’t want to strike yourself or someone else who might be holding the rabbit.
is easiest to do with two people. Never hang the rabbit upside down and then hit it; this just causes the rabbit to stress out before it’s killed.

**A more hands-on method of culling is to dislocate the rabbit’s neck.** The “twist and crunch” method is instantaneous and painless if done correctly but it requires practice, skill and, most importantly, strength. It’s best to watch someone else do it first and have them help you learn the right way to hold the rabbit. Here’s how it works: Hold the rabbit by its hind legs with your non-dominant hand (left if you’re right-handed.) Place the thumb of your other hand on the neck just behind the ears, with your fingers extended under the chin. Stretch the rabbit by pushing down on the neck and pressing in with your thumb. Then, with a quick upward movement, raise the animal’s head and dislocate the neck.

**The “broomstick method” is another alternative can be performed by one person.** It could cause bruising in the shoulder area of the meat, though. Put the rabbit on the ground and distract him with a treat. Take a sturdy broomstick and lay it across the rabbit’s neck while positioning his front legs to point towards his tail. With your feet on either side of the rabbit, step onto the broomstick and quickly grasp the hind legs, firmly pulling them straight upward. Pull until you feel the neck break.

Because you’ll want to cull the rabbits humanely, you’ll need to recognize the signs of a failed kill attempt. If you have completed your killing method and then see any of the following movements from the rabbit, repeat the kill process immediately to ensure the rabbit is dead and not suffering.

- The head easily swings back and forth
- The rabbit is bleeding through the nose, ears, or mouth
- The rabbit can blink

Once you have ensured that the rabbit is dead, cut the rabbit’s jugular vein and hang the rabbit from a hook over a bucket, sink or other place where you can drain the blood.
Dressing the carcass for meat

1. After draining the blood, lay the rabbit down on its back and grab a bit of skin and fur at the top of the rib cage, a few inches below the front legs. Slice across the skin, making a hole to insert your knife into.
2. Carefully slide your knife into the chest of the rabbit, just cutting through the skin and avoiding the innards. The cut should begin in the chest cavity and you will need to slice through a bit of muscle to get to the lower half with the intestines, bladder, etc.
3. Hold the rabbit up by its front legs and give the back legs a little tug. This will loosen the innards.
4. Insert two fingers into the chest at the top of your cut. Pull your hand downward and you’ll pull all the organs with you. Be careful not to smash or break anything to prevent contamination. The kidneys, heart and liver can be saved for yourself or pets to consume. Trim out anything that may not just pull free.
5. Lay the rabbit back down on the cutting board and use your meat cleaver to take off the back legs at the hock joint, the front legs, the head and the tail.
6. Beginning with the pelvis-half of the carcass, begin peeling the skin away from the body, rolling the hide over your knuckles as you pull it away from the meat. Keep rolling until the lower half of the carcass is skinned.
7. Using a knife, cut downwards and separate the hide from the body where it is still attached to the pelvis.
8. Now you are going to pull the rest of the rabbit hide off in one motion. Pick up the carcass, grasping the hind quarters in one hand and the hide in your other hand. The back of the rabbit should face up and you will pull the fur from the middle of the rabbit out towards its head. Grasp the hide firmly, again rolling it with your knuckles for leverage. Using one swift pull, yank the whole skin off the top half of the rabbit.
9. Finish the initial cut down the rabbit’s chest all the way down the pelvis. Lay the knife blade down the middle of the pelvis and hit it with your hand, cutting through the pubic bone. Trim out the rectum, any other remaining innards and areas where fur might have stuck to the meat.
10. Place the carcass in a bucket of salt water (a fist full of salt to one bucket of water) overnight. This will remove some of the bitter, gamey taste of the rabbit, make the meat more tender and cause the meat to be a bit lighter (especially with dark furred rabbits.) You can also just do a 15 minute soak if you prefer.
11. Rinse the carcass off, portion the meat (see following section) and freeze. You can also boil the entire rabbit (or several rabbits) for 2-3 hours and then debone. Store the cooked meat in a bowl in the fridge, covered it with olive oil. Rabbit meat can be stored up to 2 weeks this way and you just take out as much as you need each night.
Portioning the Meat

Using a knife, you can cut a medium-sized rabbit carcass into seven pieces: two hind leg pieces, a loin, two rib pieces, and two front leg pieces. Don’t use a cleaver because you could splinter the bones. A fryer rabbit usually fits into one gallon- or two pint-sized freezer bags.

1. Separate the front legs from the rib cage.
2. Cut across the back at the end of the ribs and separate it into two equal halves by splitting along the backbone.
3. Leave the center loin in one large piece.
4. Cut the backbone between the two rear legs and remove it from loin section.

Larger carcasses can be cut into twelve pieces by cutting each hind leg piece into two pieces, the loins and back portion of the ribs into five pieces, and the front portion of the ribs and each of the front legs into one serving each.

Curing the Skins

If you plan to keep the skins, they should be shaped while they are still warm. Rinse the hide in cool water, making sure to remove all traces of blood which can stain the pelt. Don’t worry about getting all bits of fat or tissue at this stage. Soap isn’t necessary but if you do use it, be sure to wash it all out of the fur before continuing. Gently squeeze the water from the pelt but never wring it! Now you will either want to freeze or stretch and dry the skin.

If you choose to freeze it, remove all fat and tissue and ensure that all the water is out of the pelt. Wrap it in freezer paper or airtight containers and defrost when you’re ready to tan it.

To stretch the skins, place it flesh side out on a wire or board “stretcher,” making sure both front feet casings are on the same side. A skin shaper can be made from 5 feet of No. 9 galvanized wire and should have the basic shape of an upside down “U.” The skin should not really be pulled and stretched out, but rather held taut by the fame (use clothespins to attach it to the frame) so all wrinkles are removed from the skin.

Hang skins in a warm, dry room where air can circulate freely around them. Do not use artificial heat or hang them in the sun. After 24 hours, examine the pelts to see that the edges are flat and wrinkle-free, that the skin on the front legs is straightened out and that all patches of fat are removed.

If you will not use or ship the dried skins for some time, hang them in loose bundles of fifty in a cool, dry place away from rats and mice. In the summer, sprinkle the stored skins with naphtha flakes. Never use salt in curing rabbit skins.
Tanning the Pelt

The first step in the tanning process is to thoroughly soften the skin and clean any traces of flesh and fat from it. Use a dull knife or an old spoon for a scraper. If the pelt is whole, slit it down the middle of the belly and soak it in clear, cool water. Change the water several times, squeezing, rolling, and working the skin over a smooth board or pail until all adherent tissue, fat, flesh, oil, and grease is removed. Don’t wring the skin. The animal’s age and the thickness of the pelt will determine how long it needs to be soaked and cleaned. The most uniform hides come from rabbits 12–14-weeks old and you may find uneven pelts on older animals.

Usual soaking time varies between 2 and 3 hours but do not oversoak because it may cause the hair to slip. The final soaking and working should be done in lukewarm water containing one ounce of washing soda or borax per gallon of water plus a small amount of soap. Remove the hide from the borax water, rinse it several times in lukewarm water, squeeze dry, and dip and work again in gasoline to remove all tissue, dirt, fat, and grease. The skin is now ready for tanning.

Tanning by the Salt-Alum Process

Ingredients:

- 16 oz. (1 lb.) ammonia-alum sulphate or potash-alum per gallon of water
- 4 oz. crystallized sodium carbonate or washing soda
- 8 oz. table/noniodized salt per 1/2 gallon of water
- 1 oz. borax
- Several pounds of flour to thicken above mixture

Directions:

In one bucket, dissolve ammonia-alum or potash alum in one gallon of water. In another bucket with 1/2 gallon of water, add and dissolve washing soda and salt. Pour the soda-salt solution slowly into the alum solution, while stirring vigorously. Add sufficient flour to make a thin paste, first mixing the flour with a little water to prevent lumps.

Tightly tack the previously prepared pelt, flesh side out, on a board. Coat with 1/8” of tanning paste. Allow 24 hours to dry, protected by paper or a bag. After 24 hours, scrape off the paste and repeat the process. Thick skins may need several applications. Leave the last coat on for 3 to 4 days, then scrape. Work the skin in borax water, rinse, and squeeze dry, but do not wring.

Stretch and work the pelt back and forth, flesh side down, over the edge of a board. Pretend you’re shining shoes with a cloth. The more the pelt is worked, the smoother and more pliable it will be. If the pelt is not soft enough when dry; rewet and rework. A sandpaper block may be used to gently sand the rough or thick areas on the wet pelt. A final cleaning may be given by working the skin in warm, dry, hardwood sawdust. This will restore luster to the fur.
Resources

Rabbit Housing Plans

Rabbit Cages

Homemade Rabbit Cages
Plans for conventional and Quonset-style wire rabbit cages with the dimensions 30-inches deep, 36-inches long and 18-inches deep.

Rabbit Houses

Six or Twelve Cage Rabbit House – North Dakota State University
8’ x 8’ Rabbit House for 6 cages in single rows or 12 cages in double rows
http://www.ag.ndsu.nodak.edu/abeng/plans/6233.pdf

Expandable Eight Cage Rabbit House with Pole Construction – North Dakota State University
8’ x 8’ Rabbit House for 6 cages in single rows or 12 cages in double rows
http://www.ag.ndsu.nodak.edu/abeng/plans/6233.pdf

Commercial-Scale Rabbitries

Four-Row Caged Rabbit House Plans – Mississippi State University
An equivalent of 64 - 30"x30" or 52 - 36"x30" cages for does and young plus 2 - 24"x30" cages for bucks can be installed.
http://www.poultry.msstate.edu/extension/pdf/rab-6360b.pdf

Six-Row Caged Rabbit House Plans – Mississippi State University
An equivalent of 108 - 30"x30" or 90 - 36"x30" cages for does and young plus 12 - 24"x30" cages for bucks can be installed.

Rabbit Hutches

Pequoda’s Rabbit Hutch –Mother Earth News
Plans to simply build a two-cage rabbit hutch which sits on blocks. Complete diagrams of the hutch found in the Image Gallery.

Single-Row Rabbit Hutch – LSU AG
Two -cage rabbit hutches.

Single and Double Deck Rabbit Houses – North Dakota State University
Two and four cage rabbit hutches. Includes plans for a nest drawer as opposed to a nest box.
http://www.ag.ndsu.nodak.edu/abeng/plans/6137.pdf

Forums

Yahoo Groups – Meat Rabbits
http://pets.groups.yahoo.com/group/Meatrabbıts

Yahoo Groups – American Blue & White Rabbits
http://pets.groups.yahoo.com/group/AmericanRabbıts/

Yahoo Groups -- Beverens
http://pets.groups.yahoo.com/group/beverens/

Yahoo Groups – Chinchilla Rabbits
http://pets.groups.yahoo.com/group/chinchillarabbits/

Yahoo Groups – Silver Fox News
http://pets.groups.yahoo.com/group/SilverFoxNews/
National Rabbit Breeder Associations

American Rabbit Breeder’s Association
www.arba.net

The British Rabbit Council
www.thebrc.org

The Rabbit Council of New Zealand
www.rabbits-nz.co.nz

US State Rabbit Breeder Associations

The Kentucky State Rabbit Breeders Association
www.tksrba.com

Oregon League of Rabbit & Cavy Breeders
www.olrcb.net

Pennsylvania State Rabbit Breeders Association
www.pasrba.org

Texas Rabbit Breeders Association
www.texasrba.net

UK Area Rabbit Breeder Associations

South Devon Fanciers Rabbit Society
www.freewebs.com/southdevonrabbit

Exeter & South West Counties Rabbit Fanciers
www.freewebs.com/eswcrf

Gloucester Rabbit Club
www.gloucesterrabbitclub.com
New Zealand Breed Associations

**North Shore Rabbit Club**  
Pauline Taylor, Auckland  
Phone 09-4822476  
Email: pauline.rabbits@xtra.co.nz

**South Auckland Rabbit Club**  
Jane Bell, PO Box 23400, Manukau 2155, Auckland

**Canterbury Cavy and Rabbit Fanciers Association**  
Dave Fairbrother, Kaiapoi  
Phone 03 3273847  
Email: maladrick@hotmail.com

**Canterbury Domestic Rabbit Association**  
P Hooper  
Christchurch  
6a Chartwell St

**Waikato Rabbit Club**  
Sarah Freeman, 91 Marsden Point Rd, Ruakaka, Northland  
Email: arfarabbits@gmail.com

**Central Districts Rabbit Club**  
Viki Matheson  
Email: ANVIC@xtra.co.nz

**The Enderby Island Rabbit Club of New Zealand**  
Wayne Edmond  
Email: dabulletman@hotmail.com

**Western Ranges Critters Club**  
Marty Cooper Taranaki  
Email: westhaven@xnet.co.nz
Breed Specific Associations

United States

American Beveren Rabbit Breeder Association
http://www.freewebs.com/beverens

American Beveren Rabbit Club
http://beverens.8m.com/

Californian National Rabbit Club
www.nationalcalclub.com
Susan Yeary, 3201 North Alamo Rd, Edinburg, TX 78541
Phone: 956-383-2228 Email: yearycals@att.net

Champagne d'Argent Rabbit Federation
Lenore Gergen, 16540 Hogan Ave, Hastings, MN 55033
Phone: 651-283-0202 Email: mccavy@aol.com

American Chinchilla Rabbit Breeders Association
Diana Young, 7447 E State Road 45, Unionville, IN 47468
Phone: 812-339-0040 Email: secam.chin@yahoo.com

American Standard Chinchilla Rabbit Breeders Association
www.ascrba.com
Patricia Gest, 1607 9th St W, Palmetto, FL 34221
Phone: 941-729-1184 Email: cgest@aol.com

Cinnamon Rabbit Breeders Association
www.crbaonline.com
Nancy Searle, 550 Amherst Rd, Belchertown, MA 01007
Phone: 413-253-7721 Email: nsearle@umext.umass.edu

Crème D'Argent Federation
www.cremedargentfederation.com (website down at publication)
Travis W West, 2290 Factory Rd, Albany, OH 45710
Phone: 740-698-3014 Email: cremedargent@hotmail.com

Florida White Rabbit Breeder Association
www.fwrba.net
Jane Meyer, 1795 N 1800 E Rd, Thawville, IL 60968
Phone: 217-387-2427 Email: arbayuth@illicom.net
American Harlequin Rabbit Club  
www.americanharlequinrabbitclub.com  
Pamela Granderson, 14991 Opera Rd, Leopold, IN 47551  
Phone: 812-843-5460

Hotot Rabbit Breeders International  
www.hrbi.org  
Matthew Hinderman, 5988 S Mohawk, Ypsilanti, MI 48197  
Phone: 734-904-3617 Email: matthewwhinderman@yahoo.com

Lop Rabbit Club of America  
www.lrca.us  
Jeanne Welch, Po Box 236, Hornbrook, CA 96044  
Phone: 530-475-3371 Email: lrcasecretary@aol.com

American Federation of New Zealand Rabbit Breeders  
www.newzealandrabbitclub.net  
John T Neff, 1351 Halder Ln, Geneva, FL 32732  
Phone: 407-349-0450 Email: newzealand1121@aol.com

Palomino Rabbit Co-Breeders Association  
Deb Morrison, 396202 W 4000 Rd, Skiatook, OK 74070  
Phone: 918-396-3587 Email: morepals@aol.com

National Rex Rabbit Club  
www.nationalrexrc.org  
Arlyse Deloyola, 117 Allegheny Court, San Marcos, TX 78666  
Phone: 512-392-6033 Email: deloyola@centurytel.net

American Sable Rabbit Society  
Dennis E Frost, PO Box 48440, Wichita, KS 67201  
Phone: 316-944-0522 Email: sablepres@gmail.com

American Satin Rabbit Breeders Association  
www.asrba.org  
Rita Peralta, 2233 Snyder Ln, Stockton, CA 95215  
Phone: 209-931-0983 Email: peraltarita@comcast.net

National Silver Fox Rabbit Club  
www.facebook.com/pages/National-Silver-Fox-Rabbit-Club-Official/134241231995  
Rae Harris, 4177 Olive Branch Rd, Galien, MI 49113  
Phone: 269-545-2534 Email: silver_fox@hughes.net
Silver Marten Rabbit Club
www.silvermarten.com
Stephanie Coon, 921 W Cody Ave, Hermiston, OR 97838

United Kingdom

The Beveren Club
Mr. B. Cookson 01274-574205

National Californian Rabbit Association
Mr. W. Wheeler Phone: 01451-831092

National French & Dwarf Lop Club
Website: www.nfdlc.com
Miss Sarah & Mrs Hazel Elliott Email: mail@nfdlc.com

Northern Lop Club
Website: www.thenorthernlopclub.co.uk
Mr Phil Batey Phone: 01228 818112 Email: enquiries@thenorthernlopclub.co.uk

National New Zealand Rabbit Club
Mrs. C. Gray Phone: 01724-783644

Southern and South Western Rex Society
http://freewebs.com/sswrex

The Sable Rabbit Club
Mr. A. Thompson Phone: 01539-532787

National Satin Club
Mr. I. Marriott Phone: 01530-230288

National Silver Fox Rabbit Club
Mr. A. J. Nielsen Phone: 01943-864083

New Zealand

The Lop Rabbit Society of New Zealand
Contact: Pauline Taylor, Auckland Phone 09-4822476

The National Rex Club of New Zealand
Contact: Tamsin Redwood 10 Dundas Road 4817, Sanson.
Email: cleverat@hotmail.com
Equipment & Supplies

United States

Bass Equipment Company
Website: www.bassequipment.com
Cages, feeders, waterers, tattoo equipment, kennels, liner pans, hutches and everything else you need for raising rabbits.

Klubertanz Equipment Co.
Website: www.klubertanz.com
Stackable and singular cages, cage-making supplies, medications, feeders, waterers and other necessities for your rabbitry.

Koenig’s Kountry Supplies
Website: www.koenigskountrysupplies.com
Reasonably priced hanging, single and stackable cages, nest boxes, medications, feeders, waterers and other essentials.

KW Cages
Website: www.KWCages.com
Really nice kennel systems, stackable cages, veterinarian supplies, waterers, feeders and everything else you need to run a successful rabbitry.

Superior Rabbits and Equipment
Website: www.superiorrabbits.com
Cages, feed, medications, waterers, feeders, grooming supplies, etc. Will also work with you to make custom-sized cages.

United Kingdom

Animal Mad
Website: www.animalmad.ltd.uk
Medicines, supplements, First Aid, disinfectants, pest control, grooming accessories and more to keep your rabbits healthy.

Carr’s
Website: www.naturalfeeds.co.uk
Specialty feed for rabbits.

M & D Animal Housing
Website: www.animalhousing.biz
Hutches and housing for rabbits and other small livestock.
Feed Supplies

Heinhold Feeds
Website: www.heinoldfeeds.com
Feed supply company in Indiana. Also will work with you to create custom feeds. Available in feed stores across much of the US and online.

King Feed
Website: www.king-brand.com
Available at feed stores across California.

Oxbow Animal Health
Website: www.oxbowanimalhealth.com
Feed, hay, bedding, supplements and more. An organic feed is also available.

Magazines

Fur and Feather – UK
Website: www.furandfeather.co.uk
Britain’s only magazine for rabbits and small furries. Fur & Feather is the official magazine of the British Rabbit Council and contains show adverts, judges reports and photographs from shows held up and down the country.
Acceptable Foods for Rabbits -- SAFE Vegetables, Herbs & Grains

**A**
- Agrimony
- Alfalfa
- Apple (not seeds)
- Artichoke (Jerusalem)
- Arugula
- Asparagus
- Avens

**B**
- Balm
- Banana
- Barley
- Basil
- Beet tops
- Beetroot
- Blackberry (leaves, stems, fruit)
- Blueberry
- Borage
- Broccoli
- Brussel sprouts
- Buckwheat
- Burnet

**C**
- Cantaloupe
- Caraway
- Carrot (tops and root)
- Celeriac
- Celery
- Celery (small pieces)
- Chamomile
- Chard
- Chervil
- Chickweed
- Chicory
- Chinese leaf
- Chives (in moderation)
- Cilantro
- Cleavers
- Clover
- Clover, white
- Collard greens
- Coltsfoot
- Comfrey wilted slightly
- Coriander
- Corn marigold
- Corn spurrey
- Cow parsnip
- Crosswort
- Cucumber

**D**
- Dandelion (leaves, stem, flower)
- Dead-Nettles
- Dill
- Dock before flowering

**E**
- Endive
- Escarole

**F**
- Fat hen
- Fennel
G
Goosefoot
Goosegrass
Goutweed before flowering

Grapes (mashed)
Green pepper
Ground elder before flowering

H
Hawkbit
Hawkweed
Heather

Hedge parsley
Honey dew melon
Horseradish

J
Jerusalem artichoke

K
Kale
Knapweed

Knotgrass
Kohlrabi

L
Lavender
Lemon balm
Lettuce (romaine, red & grn leaf)

Lilac
Lovage

M
Mallow
Marigold
Marjoram
Mayweed
Maywort
Meadowsweet

Mallow
Marigold
Marjoram
Mayweed
Maywort

Meadowsweet
Melon
Milk thistle
Mint
Mugwort
Mustard greens

N
Nipplewort

O
Oats
Orache

Oxeye daisy

P
Papaya (no seeds)
Parsley
Parsnip

Peach
Pear
Peppermint
Pigweed
Pineapple
Plantain

**R**
Radish greens (tops)

**S**
Sage
Sanfoin
Savory
Shepherd’s purse
Silverweed

**T**
Tare
Tomato (fruit only; greens are toxic)

**V**
Vetch

**W**
Watercress
Watermelon

**Y**
Yarrow

**Z**
Zucchini

Pok Choi
Pumpkin

Raspberry (leaves, stems, fruit)

Sow thistle
Soya
Spinach
Strawberry
Swiss Chard

Trefoil

Vine leaves

Wheat
Toxic Foods for Rabbits

A
Agave (leaves)                          Apricot (all parts except fruit) Asian Lilly
Almond                                  Asparagus Fern
Aloe                                     Australian Nut
Amaryllis (bulbs)                       Autumn Crocus
Andromeda Anemone                       Avocado (leaves)
Angel's Trumpet                         Azalea (leaves)
Apple (seeds)

B
Balsam pear (seeds, outer rind of fruit)         Buddhist Pine
Baneberry (berries, roots)                   Busy Lizzie
Barbados Lilly                             Buttercup (leaves)
Begonia                                   Black Locust (seeds, bark, sprouts, foliage)
Betel-nut Palm                            Blue-green algae (some forms toxic)
Bird of Paradise (seeds)                                 Bloodroot
Bitter Cherry (seeds)                                           Boxwood (leaves, twigs)
Bittersweet (American & European)                    Bracken fern
Black Nightshade                          Branching Ivy
Black Walnut (hulls)                       Buckeye (seeds)
Bloodroot                                 Buckthorn (berries, fruit, bark)
Bluebonnet                                 Bull Nettle
Boston Ivy                                
Butter cup (sap, bulbs)

C
Cactus Thorn                            Chinaberry tree
Caladium                                 Chinese Bellflower
Calendula                                Chinese Lantern
Calico Bush                              Chinese Evergreen
Calla Lilly (rhizome, leaves)                        Choke Lantern
Caladiur (leaves)                          Christmas Cherry (seeds)
Carnation                                 Christmas Candle (sap)
Carolina Jessamine                        Christmas Rose
Castor Bean (seed, leaves - castor oil)  Chrysanthemum
Celastrus                                 Cineraria
Ceriman                                   Clematis
Chalice vine (all parts)              Climbing Nightshade
Cherry tree (bark, twig, leaves, pits)  Coffee Bean
China Doll                                Cone Flower
                                     Coral plant (seeds)
<table>
<thead>
<tr>
<th>Plant/Phenomenon</th>
<th>Poisonous Part(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cordatum</td>
<td>Cuban Laurel</td>
</tr>
<tr>
<td>Corn Plant</td>
<td>Cuckoo pint (all parts)</td>
</tr>
<tr>
<td>Cowbane</td>
<td>Cutleaf Philodendron</td>
</tr>
<tr>
<td>Cowslip</td>
<td>Cycads</td>
</tr>
<tr>
<td>Crown of Thorns</td>
<td>Cyclamen</td>
</tr>
<tr>
<td>Daffodil (bulbs)</td>
<td>Delphinium (all parts)</td>
</tr>
<tr>
<td>Daisy</td>
<td>Devil’s Ivy</td>
</tr>
<tr>
<td>Daphne (berries, bark)</td>
<td>Dieffenbachia (leaves)</td>
</tr>
<tr>
<td>Datura (berries)</td>
<td>Dogbane</td>
</tr>
<tr>
<td>Day Lily Deadly Amanita (all parts)</td>
<td>Dracaena</td>
</tr>
<tr>
<td>Deadly Nightshade</td>
<td>Dumb Cane</td>
</tr>
<tr>
<td>Death Camas (all parts)</td>
<td>Dutchman’s Breeches</td>
</tr>
<tr>
<td>Easter Lilly</td>
<td>Emerald Feather</td>
</tr>
<tr>
<td>Eggplant (all but fruit)</td>
<td>English Laurel</td>
</tr>
<tr>
<td>Elderberry (unripe berries, roots, stems)</td>
<td>English Ivy (berries, leaves)</td>
</tr>
<tr>
<td>Elephant Ear (leaves, stem)</td>
<td>Eucalyptus</td>
</tr>
<tr>
<td>False Hellebore</td>
<td>Flamingo Plant</td>
</tr>
<tr>
<td>False Henbane (all parts)</td>
<td>Florida Beauty</td>
</tr>
<tr>
<td>False Parsley</td>
<td>Flowering Maple</td>
</tr>
<tr>
<td>Fiddle Leaf Fig</td>
<td>Flowering Tobacco</td>
</tr>
<tr>
<td>Fireweed</td>
<td>Foxglove (leaves, seeds)</td>
</tr>
<tr>
<td>Garden Sorrel</td>
<td>Gladiola</td>
</tr>
<tr>
<td>Geranium</td>
<td>Glory Lily</td>
</tr>
<tr>
<td>German Ivy</td>
<td>Gold Dust</td>
</tr>
<tr>
<td>Ghostweed (all parts)</td>
<td>Golden Chain (all parts)</td>
</tr>
<tr>
<td>Giant Touch-me-not</td>
<td>Golden Pothos</td>
</tr>
<tr>
<td>Glacier Ivy</td>
<td>Green Gold</td>
</tr>
<tr>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Hahn’s Ivy</td>
<td>Hogwart</td>
</tr>
<tr>
<td>Hairy Vetch</td>
<td>Holly (berries)</td>
</tr>
<tr>
<td>Hart Ivy</td>
<td>Horse Chestnut (nuts, twigs)</td>
</tr>
<tr>
<td>Hawaiian Ti</td>
<td>Horsehead Philodendron</td>
</tr>
<tr>
<td>Heartleaf Philodendron</td>
<td>Horsetail Reed</td>
</tr>
<tr>
<td>Heavenly Bamboo</td>
<td>Hurricane Plant</td>
</tr>
<tr>
<td>Hemlock, Poison (all parts)</td>
<td>Hyacinth (bulbs)</td>
</tr>
<tr>
<td>Hemlock, Water (all parts)</td>
<td>Hydrangea</td>
</tr>
<tr>
<td>Henbane (seeds)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Impatiens</td>
<td>Inkberry</td>
</tr>
<tr>
<td>Indian Hemp</td>
<td>Iris (bulbs)</td>
</tr>
<tr>
<td>Indian Rubber Indian Turnip (all parts)</td>
<td>Ivy, Boston &amp; English (berries, leaves)</td>
</tr>
<tr>
<td>Indigo</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>J</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Jack-in-the‐Pulpit (all parts)</td>
<td>Jerusalem Cherry (berries)</td>
</tr>
<tr>
<td>Japanese Euonymus</td>
<td>Jessamine</td>
</tr>
<tr>
<td>Japanese Show Lily</td>
<td>Jimson Weed (leaves, seeds)</td>
</tr>
<tr>
<td>Japanese Yew</td>
<td>Johnson Grass</td>
</tr>
<tr>
<td>Jasmine</td>
<td>Jonquil</td>
</tr>
<tr>
<td>Java Bean (uncooked bean)</td>
<td>Juniper (needles, stems, berries)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Laburnum (all parts)</td>
<td>Laurel Cherry</td>
</tr>
<tr>
<td>Lace Fern</td>
<td>Lily of the Valley (all parts)</td>
</tr>
<tr>
<td>Lacy Tree Philodendron</td>
<td>Lima Bean (uncooked bean)</td>
</tr>
<tr>
<td>Lady Slipper</td>
<td>Lobelia (all parts)</td>
</tr>
<tr>
<td>Lantana (immature berries)</td>
<td>Locoweed (all parts)</td>
</tr>
<tr>
<td>Larkspur (all parts)</td>
<td>Lords and Ladies (all parts)</td>
</tr>
<tr>
<td>Laurel (all parts)</td>
<td>Lupine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>M</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Macadamia Nut</td>
<td>Marsh Marigold</td>
</tr>
<tr>
<td>Madagascar Dragon Tree</td>
<td>Mauna Loa Peace Lily</td>
</tr>
<tr>
<td>Manchineel Tree</td>
<td>Mayapple (all parts except fruit)</td>
</tr>
<tr>
<td>Marbel Queen</td>
<td>Meadow Saffron</td>
</tr>
<tr>
<td>Marijuana (leaves)</td>
<td>Medicine Plant</td>
</tr>
</tbody>
</table>
Mesquite
Mexican Breadfruit
Meskal Bean (seeds)
Milk Bush
Milkweed
Mistletoe (berries)
Mock Orange (fruit)

Monkshood (leaves, roots)
Moonflower
Morning Glory (all parts)
Mother-in-law
Mountain Laurel
Mushrooms (some)
Mustard (root)

N
Nandina
Narcissus (bulbs)
Needlepoint Ivy
Nephtytis
Nicotiana
Nightshades (berries, leaves)
Nutmeg

O
Oak (acorns, foliage)
Oleander (leaves, branches, nectar)
Oxalis

P
Panda
Parlor Ivy
Parsnip
Patience Plant
Peace Lily
Peach (leaves, twigs, seeds)
Pear (seeds)
Pencil Cactus
Peony
Periwinkle
Peyote
Philodendron (leaves, stem)
Plum (seeds)
Plumosa Fern
Poinsettia (leaves, flowers)
Poison Hemlock
Poison Ivy
Poison Oak
Poison sumac
Pokeweed
Poppy
Potato (eyes & new shoots, green parts)
Precatory Bean
Primrose
Primula
Privet (all parts)
Purple Thornapple

Q
Queensland Nut
R
Ranunculus
Red Emerald
Red Lily Red Princess
Rhododendron (all parts)
Rhubarb (leaves)

Ribbon Plant
Ripple Ivy
Rosary Pea (seeds)
Rubrum Lily

S
Sago Palm
Schefflera
Self-branching Ivy
Sennabean
Shamrock Plant
Silver Pothos
Skunk Cabbage (all parts)
Snake Palm
Snowdrop (all parts)
Snow-on-the-Mountain (all parts)

Solomon’s Seal
Spindleberry
Split Leaf Philodendron
Star of Bethlehem
Stinkweed
String of Pearls
Sweet Pea (seeds and fruit)
Sweet Potato
Sweetheart Ivy
Swiss Cheese Plant

T
Tansy
Taro Vine
Thornapple
Tiger Lily

Toadstools
Tomato (leaves, vines)
Tree Philodendron
Tulip (bulb)

U
Umbrella Plant

V
Vetch (Hairy)
Vinca Violet (seeds)

Virginia Creeper (berries, sap)

W
Walnuts (hulls, green shells)
Water Hemlock
Weeping Fig

Western Lily
Wild Carrots
Wild Cucumber
<table>
<thead>
<tr>
<th>Wild Parsnip</th>
<th>Wood Lily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wild Peas</td>
<td>Wood-rose</td>
</tr>
<tr>
<td>Wisteria (all parts)</td>
<td></td>
</tr>
</tbody>
</table>

**Y**

<table>
<thead>
<tr>
<th>Yam Bean (roots, immature pods)</th>
<th>Yew (needles, seeds, berries)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow Jasmine</td>
<td>Yucca</td>
</tr>
</tbody>
</table>