



Raising Worms With Rabbits

by Kazuko "Kay" Smith

Most of you recognize rabbits as the cute, furry little critters sold in pet stores. They are, however, a valuable livestock for food and for other commercial purposes. A large commercial doe such as the New Zealand White or Californian can produce approximately 30 to 40 young each year. That is approximately 70 to 95 lbs. of dressed, edible meat. No other animal can be kept in a space 30" x 36" and produce 8 to 10 times her own weight in edible meat in a year. Rabbits produce meat higher in protein and lower in fat and cholesterol than chicken. When fed a well-balanced diet they normally need little or no medication. Rabbits also create an excellent source of organic plant food faster than they can create more rabbits. A large doe and her four litters of about 28 to 32 young a year will produce approximately six to seven cubic feet of manure annually.

Unlike other animal manure, rabbit manure is relatively dry and pelleted. It has approximate values of 3.7% nitrogen, 1.3% phosphorus, 3.5% potassium, and also contains many trace elements such as calcium, magnesium, boron, zinc, manganese, sulfur, copper and cobalt to name a few. Most types of animal manure contain high nitrogen levels that can burn the roots of plants when applied fresh. Rabbit manure, however, is considered "cold" manure that can be freely applied directly to your vegetable and flower gardens, shrubs, trees, potted plants and lawns without danger of burning. There is no weed-seed problem and little danger of contaminating of consumable crops. Although fresh rabbit manure is considered a valuable garden fertilizer, many rabbit growers choose to raise earthworms under their rabbit cages. Rabbit manure along with wasted rabbit feed from the elevated hutches makes for some of the finest worm feed. When properly cared for, earthworms eliminate unsightly manure piles, odor, and fly problems.

Make Fabulous Compost with the Help of Earthworms

I have found that the best kind of earthworm to use under rabbit cages is the redworm. The stocking rate should be 300 to 500 worms per square foot of surface area. Redworms will recycle the rabbit manure and wasted feed from the hutches into dark, nutrient-rich, finely-textured humus. Keeping earthworms under the rabbit cages also allows you to raise worms for fishing bait and create worm castings for your garden. In other words, raising earthworms and rabbits

together results in a triple crop that takes up the same space and offers many great benefits.

Underneath your small rabbit hutch you can build an inexpensive wood frame worm bed about 12 inches deep. The rabbit hutch should be positioned at least 3 foot above the ground and you should use a ½ inch wire mesh floor so rabbit droppings can fall through easily. Add bedding material to the bed: Good bedding can be any combination of carbon: shredded paper products, decomposing leaves, hay, straw, peat moss etc. Start with a 3 to 4 inch layer of carbon material on the bottom of worm bed. Moisten the bedding with water and let your rabbits do their thing until the surface is covered with 1 to 2 inches layer of rabbit manure. Mix the nitrogen (rabbit manure) and carbon (bedding) material together and wet it down thoroughly. Although rabbit manure is considered a cold manure, under these conditions it can still generate heat due to natural decomposition processes, so you must keep mixing the bedding and lightly water it once a day for about 2 to 3 days. On the third day, put your hand into the bed to feel for heat. If the bedding material is hot, keep mixing it once a day until all the heat is out of the bedding material before you begin putting your worms into the beds. If the bedding is cool to the touch, you can release the worms. They should disappear immediately into the moist bedding material.

Keep in mind that the worms cannot eat dry, piled-up rabbit manure. Maintain moisture levels so the bedding is just damp enough to squeeze out one or two drops of water when you squeeze. Also, worms cannot tolerate salt but because rabbit urine contains salt, so you must remove the rabbit's wet spots regularly. Leaving undesirable urine spots in the worm bed eventually leads to a bad odor and insect problems. For best results, keep adding a thin layer of brown material to cover the surface of the bedding and loosen the contents of bed with a pitchfork at least two to three times a month from top to bottom to avoid packed bedding.

When the worm bed is almost full, move the finished vermicompost over to one side of the bin, place fresh bedding in the space created, and try to spread new rabbit droppings on the new bedding only. The worms will gradually move over to the new bedding and then you can removed the finished compost.

Medium to Large-Scale Rabbit Cages

Rabbit cages can be as long as you like. But I think the ideal setups for medium to large-scale rabbit growers are 12' to 24' long unit cages partitioned every 36". They should be 24" wide and 18" high and have metal feeders and water bottles (or automatic drinking valves) attached to the front of the cages. Suspend the cages back to back from the bed's center posts or secure them to rafters 3' above ground level. The center posts should be spaced every 6' to 8'.

The worm bed itself should be 4" to 5" wider than the hutch area to catch all the rabbit

droppings, urine and wasted feed. The worm beds can be built from lumber that is either 1" x 12" or 2" x 12", or you can use the pit system. You should use a base layer of sand or gravel for drainage. Placing 5 to 6 inches of bedding material in the bottom of the worm bed is sufficient for starting the worms. Follow the instructions given above in the "Small Outdoor Rabbit Hutches with Wire Bottoms" section for bedding preparation and worm bed maintenance instructions.

Sprinkling the beds with water at least two to three times a week helps to keep the bedding moist, but remember to bypass the center section of the worm bed and areas under the automatic drinking valves as they are usually already wet enough. In the summer time, you may have to water once or twice a day if the top of the worm beds dries too fast.

When your worm bed is full, the old bedding material from the center section of the worm bed can be removed for use on your garden. If you still have lots left, consider giving some away to friends and neighbors, or look into selling some of your worm castings as soil amendment. To harvest worm castings, begin by removing the central 1/3 of the length of the worm bed with a garden fork or shovel. Try to remove as much old bedding material from this area as possible. Be careful not to cheat and take it from the outside thirds, as this is the area where you will find most of your worms. Once all of the oldest, central material is removed, you must then mentally divide the two remaining thirds into halves. Consider the inner half (closest to the center) the older material and the outer half the newer material containing "worm centers". Backfill the trenched area with the inner (older) half of the material first. The outermost edge (approximately 12") of the worm bed should then be covered with a thin layer of new bedding material such as aged sawdust, shredded dry leaves, shredded newspaper, rice hull, hay, or other organic material. Do not add bedding material more than one inch at a time because too much bedding will heat up and may kill your worms. Turn in the outer portion then wet it down thoroughly.

Do not harvest any worms for at least a few days after this procedure, and be sure to check the temperature and moisture conditions the following day. If the material is too dry or is heating up, water it again for the next few days.

If you plan to use some of your worm castings as soil amendment, make sure that the castings are kept about 35% moist and protected from sun and bad weather. Poor handling, such as storing the castings in areas leached by rainwater, will result in substantial loss of nutrients.

©2001 Kazuko Smith. All Rights Reserved.

Images and articles that are not Happy D Ranch originals have been used by permission.