Rodent Rearing! So You Want to Get Started Breeding Your Own Rats and Mice as Feeders!

Have you ever considered what it would be like to begin breeding your own feeder rodents? Whether they be rats, mice, or occasionally other species of rodents sometimes bred as feeders such as guinea pigs or even rabbits (for the larger snakes, and which of course are lagomorphs; however this guide will focus primarily on rodents). There can be many different reasons why it may become advantageous to start breeding your own feeder rodents, whether they be the savings in the amount of time and costs, for the greater practicality, or for several other reasons. Starting breeding your own feeder rodents can also be advantageous for if one happens to live in an area where there might not be many, if any other local sources for purchasing them (aside from online).


African Soft-Furred Rats.

However, there are also many considerations one should take into account before deciding to raise your own feeder rodents for your snakes, or some other reptiles well worth considering, especially if you are looking to be able to do so successfully. What scale are you looking to start breeding your rodents on, whether personally/individually, or will you become a business with customers? What do you need to get started, what are some pitfalls to avoid, and what are the overall pros and cons to breeding your own feeder rodents? Are you planning to feed “live”, or are you comfortable enough with the idea of culling if one is looking to feed “frozen/thawed” or “pre-killed”? These are all important considerations to keep in mind before getting started!

What to Know Before Getting Started!

-Perhaps one of the first considerations for potentially starting breeding feeder rodents, will be what kinds, or species of animals are you maintaining them for, which sizes of feeders will you need for which animals, and whether you will be looking to breed rats, mice, or both; or will you be breeding other rodents as well? Between rats and mice, there are not many significant different in their nutritional quality or value, although rats may be slightly more fatty than mice. For rodents, it will depend much more on the size, species, and ages of the animals you are maintaining. In many cases, depending on the size of the animal, will probably be more advantageous and practical to feed rats (since they are larger prey items), and one probably does not want a 6 or 7 foot plus snake, for example, which wants to only eat adult mice.

-In the vast majority of cases, the most commonly and widely used and available feeder rodents are the domesticated or “fancy” descendants of the House Mouse (*Mus musculus*), and the Norway or Brown Rat (*Rattus norvegicus*). Other species of mice are also sometimes available such as the Multimammate or “African Soft Fur Mice” (*Mastomys spp*.), which are technically neither “rats” nor “mice”, African Spinys (*Acromys spp*.), and a few others. These may sometimes be used for pickier eaters (particularly in association with ball pythons), but may have slightly varying temperature and humidity requirements from one’s standard “domesticated” rats and mice, and may also have slightly different reproductive habits. Guinea pigs (*Cavia spp*.) may also sometimes be used, although less commonly. But whether one wants to do African Soft-Furs, Spinys, or, for at least 90 percent of cases, standard, domestic mice or rats, is really up to you and your animals.

-Planning ahead and doing you research is perhaps one of the most important steps that can be taken before breeding your own rodents. Read multiple articles and talk to multiple different people, as well as learn through trial and error. Where to get them in the first place? Initially buying your feeder rodents from reputable and knowledgeable local hobbyists or enthusiasts who already breed their own, through your local herpetological society, local reptile expos and shows, or your local reptile or other pet stores can all be great ways of finding your feeder rodents to get started with.

-Money and costs are two additional big considerations to consider before one starts breeding their feeder rodents. Fortunately, there are still a lot of different ways and avenues one can look to for getting set up and started while still having it be relatively simple and inexpensive. Saving up, and asking around for the enclosures/housing (which can be as simple as opaque plastic storage bins, commercially made rodent “tubs”, or totes of suitable size and dimensions with enough airflow), finding a quality food or diet for your rodents, and any other supplemental lighting, heating, humidity or other aspects from second-hand sources can still be some of the best ways of still successfully starting with your feeder rodents. Likewise, the food for your feeder rodents need not necessarily be expensive, but it does need to be QUALITY food; otherwise your feeder rodent’s nutritional value will certainly be lessened, and one may also have issues with odor when it comes to maintaining your feeder rodents (more on this a bit further down).

-Space and practicality are two more large considerations to keep in mind before starting with feeder rodents as well. Where in your household are you planning on raising your feeder rodents, and on what scale? Are you planning on devoting an entire room, or even building, separate shed or outbuilding, or facility for your feeder rodents, or can you do it from simply one corner of your home? How much are you looking to produce, and how many animals will they be sustained for? Also depending on where one lives, how will you heat the room one’s feeder rodents may be kept in, and how will the humidity, odor,

and other aspects be kept in check? Will one need additional mechanical equipment, such as fans, or running a dehumidifier in the winter for these things?

You're All Set! Now What???

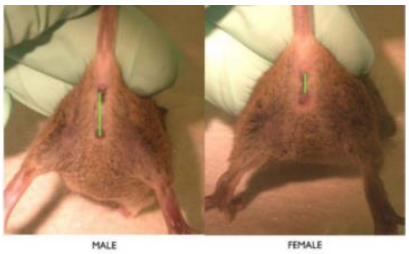

Diagram 1 of Sexing Rodents; Male on Left, Female on Right.

-Sexing both rats and mice is fairly straightforward, and one will want to make sure to be maintaining suitable and appropriate sex ratios for the space one has to work with. Sex ratios one will be able to keep together really depend on how large the enclosures, or rodent tubs will be, although in general, you can usually do at least a 1:3 (1 male, 3 females) or 1:4 (one male, four females) in most sized enclosures for rodents. In cases where you might have exceptionally large females, you might only be able to get by with a 1:2 or 1:3 ratio, or may even consider cycling your male rodents from enclosure to enclosure. Most rodents are able to be sexed at around 8 to 10 weeks for females and 10 to 12 weeks for males for rats, and for mice, about 4 to 6 weeks for females and about 6 to 8 weeks for males. **Male** rats and mice have much more pronounced bulges near their anuses where their testes are stored, whereas **Female** mice and rats have much less of, or an absent "bulge" near their anuses, instead being much more slit-like. Properly identifying the sexes of the rodents you have, and maintaining appropriate sex ratios are good practices to keep in mind to prevent overcrowding and territorial behaviors, particularly by males.

Examples of Both Professional Grade and Homemade (DIY) Single Rodent Tubs or Enclosures.

-For the **Housing and Enclosure,** there are a number of different types of enclosures that one can use for housing feeder rodents. Rats will of course need larger tubs or enclosures than mice. Glass aquariums or terrariums with secure screen tops can work, but tend to be heavier, bulkier, and more difficult to clean and sanitize. Tanks can also be less space efficient as well. Any number of suitably sized plastic Tupperware or other containers, or commercially made tubs (which can come in a variety of sizes and dimensions), specifically for feeder rodents, will tend to be more efficient and lightweight options, provided they otherwise have good ventilation and airflow. Commercially made rodent tubs will also have a screen or metal wire tops as well. Your feeder rodents can be housed in stand-alone tubs or enclosures, or one can use a commercially available or Do-it-Yourself (DIY) rodent rack or storage

shelving units made of wood, melamine, plastic, or any number of building materials (see above photos).

-For **Water**, commercially made and available water bottles, with a drinking nozzle or apparatus (see above pictured) tend to be the standard for watering your feeder rodents while keeping them hydrated. Generally, if the water is adequate for human consumption, it will be fine to use for your rodents. For **Bedding and Substrates**, there are a number of different options you can use, whether it be shredded cardboard shavings, Soft Wood shavings (such as cedar or pine, although keep in mind that these substrates are toxic or irritating to snakes and other reptiles, and might not be the best choices in this regard), or Hay or Straw (although these can be dusty and poorly absorbent), but can make for an OK topper substrate. Other substrates one could use could include Aspen or other Hardwood Shavings, Shredded Newspaper or Paper fibers, or a number of other types of substrates. Whichever substrate or bedding one uses should be absorbent, and easy to clean while reducing odors.

Examples of Feeder Rodent Racks.

-When housing rodents in any rack system or closed top system, also ensure that the tub is flush with, and fits well along the top of the material, and that there are no gaps in-between. Rodents can be escape artists through surprisingly small gaps, or they may chew through the upper rims of the container or enclosure, which should be prevented. When it comes to **Furnishings and Enrichment,** anything can really go, particularly for them to be able to chew on as to prevent their incisors from

overgrowing, and additional hiding places, furnishings, or other décor can also be added to each enclosure such as additional nesting substrate or material, wooden or cardboard tubes, wooden branches for gnawing, or almost anything else. There shouldn't be much else needed to get your rodents to breed once everything has been met.

-Temperature and Humidity-Wise, most household or room-temperatures should be find for rodents as long as your space does not become too cold (dropping below 50 degrees F), or too hot (over about 85 or 90 degrees). If any supplemental heating is necessary for your rodents, any number of overhead low wattage incandescent lights, under-tank heating pads, or Flexwatt heating tape can be used, or a space heater may be run in the room or area. If your rodent room or area becomes too hot, air-conditioning or fans may be used. Your feeder rodents can also still greatly benefit from a standard 12 to 14 hour day-night cycle as far as lighting goes, and for humidity, this will of course oftentimes depend on the area you live in and the season. During the summer, humidity for your rodents should not become too high (around 50 to 60%); otherwise they may develop respiratory and/or other health issues. In cases where your humidity starts to run too high, try running a de-humidifier in the room or space that you have for your rodents. During the winter, when the humidity tends to be lower, too low of humidity, or too dry of conditions can also lead to health issues for your rodents, and one could try instead to run a humidifier or reducing the amount of airflow or ventilation to your rodent tubs or enclosures.

Mazuri Diet.

-**Feeding and Diet** are perhaps two of the most important aspects needed for keeping feeder rodents successfully and healthy. THIS CANNOT BE STATED ENOUGH!!! Poorly maintained or poorly fed feeder rodents can cause health and worse odor issues for you (and everyone else in the household), and will make significantly more nutritionally poor food for your snakes (or other carnivorous reptiles). So what are the best diets for your feeder rats and/or mice in order for them to be the most nutritionally optimal foods for your reptile? Any number of fresh, sliced fruits or vegetables can be great choices, or any of the high quality commercially made and available feeder rodent diets and foods, are perhaps the best options that the vast majority of people choose. Mazuri Rat and Mouse diets, or other comparable high quality diets are, in almost all cases, the best choices without question.

-Likewise, there are some not-so-great choices one should generally avoid feeding or giving to your feeder rats or mice. Commercially made dog food can work for feeding your rodents, but what goes into your rodent, will have to also come out, and when it comes to the smell and odor of your rodent's feces and wastes as a result of being fed dog food, one can likely easily see why this may not be the best option. Certainly avoid cat foods as well. Other foods you should generally avoid giving to your rodents can include any foods that are high in fats or sugars, such as dairy products, and too much sweet and/or fatty foods can cause health problems, and should only ever be provided as occasional treats. Also avoid

giving your rodents chocolate, or some other fruits and vegetables high in citrus as well.

Other Final Thoughts, Tips, and Time Commitments?

-Daily care and maintenance is really going to depend on the scale of one's operation, and other things such as whether one will be preparing their own rodent diets or food., as well as the amount of cleaning and maintenance of uneaten food and/or soiled furnishings and substrate on a daily, weekly, or monthly basis. The amount of maintenance required will also depend on how self-sustaining or self-sufficient your feeder rodents are going to be. How many animals are you planning to be able to feed? Making sure one has consistency and an efficient and effective routine down for how often their feeder rodents need to be cleaned and maintained is always a good step, particularly in order to mitigate any objectionable odors or escapes and potential household infestations one would probably want to prevent.

-**Culling or Euthanizing** of your feeder rodents, whenever the time comes, is the last major consideration to keep in mind before deciding whether to breed your own rodents, particularly when one wishes to be able to feed "frozen-thawed" or "pre-killed". How do your cull, and what are the best methods for doing so? There are several old and outdated methods of culling, such as freezing which have been used as the primary means of euthanizing or culling one's feeder rodents, but these methods are no longer recommended. Presently, the most ethical and human means of culling your feeder rodents is through the use of a Carbon Dioxide (or C02) chamber. The C02 chamber can consist of any plastic or glass container or box, hooked up to, or attached to a C02 tank, as pictured in the above example diagram. One can order these components for making such a chamber professionally, although it may be more expensive, or you can construct a home-made chamber without much difficulty. The only considerations to then keep in mind will be to regulate the amount of C02 allowed into the chamber; too much C02 can lead to overdosing your rodents, and too little C02 entering the chamber, will of course be ineffective in euthanizing your rodents. Ideally, the recommended guidelines generally fall within using 30 to 70% of the chamber volume per minute.

-For more guidelines from the NIH ARAC Guidelines for the Euthanasia of Rodents Using Carbon Dioxide, see the following document: b5_euthanasia_of_rodents_using_carbon_dioxide.pdf (nih.gov)

-Once your feeder rats or mice have been sorted and selected according to their desired size needed, and successfully and humanely euthanized, they will then be ready for storage in a freezer. Depending on the scale of, and how many rodents one is planning on using, it can oftentimes be beneficial to also have one's own freezer on hand for the storage of your pre-killed rodents. A number of different sizes and styles of freezers can work, from small or portable ones all the way up to full-size freezers, and also front opening or chest-style freezers. Make sure your freezer settings are not too high or too low; otherwise freezer-burn of your rodents may happen. Another reason why it will be beneficial to

euthanize your rodents as humanely as possible will be in order to get good, clean rodents free of any blood, feces, or other stains or odors, and so they are not all clumped together, making them harder to separate afterwards. However many are culled or euthanized really depends on the amount of space one has in the C02 chamber, and how many may be needed.

Having a Scale on hand can be another good tool to have on for being able to measure and determine the weights of your feeder rodent size classes.

-So how does one know which sizes of rats or mice they have? Luckily, there are a number of good sizing charts and resources available, and this can be another good reason why, when doing your research, it will be a good idea to purchase and deal with reputable rodent breeding sources best able to accurately represent which sizes of rodents are what. There can, of course, be some variable individual intrepretation into the different ages and size classes of feeder rodents; however, here is a good starting chart and point from CVExotics on the different recommended rat and mouse sizes to use as a guide:

Mice

	Age	**Weight**	**Length in “**	**Rat Equivalent**
Pinkies	0-5 days	0.5-3.0 grams	0.5-1.0”	None
Fuzzies	6-13 days	3.0-6.0 grams	1.0-1.5”	Rat Pinkies
Hoppers	14-21 days	7.0-12.0 grams	1.5-2.0”	Rat Fuzzies
Weaned/Weanlings	21-28 days	13.0-18.0 grams	2.0-2.5 “	Rat Fuzzies
Adult-Large Adults	28-42 days	19.0-25. grams	2.5-3.0 “	Rat Pups
Jumbos/Extra Larges	6 months +	30.0 grams +	3.0” +	Weaned/Weanling Rats

Rats

	Age	**Weight**	**Length in “**	**Mouse Equivalent**
Pinkies	0-6 days	3.0-6.0 grams	1.0-2.0”	Mice Fuzzies
Fuzzies	7-13 days	9.0-20.0 grams	2.0-2.5”	Hopper or Weaned Mice
Pups	14-21 days	21.0-30.0 grams	2.5-3.5”	Large Adult Mice
Weaned/Weanlings	21-28 days	31.0-45.0 grams	3.5-4.5”	Extra-Large Mice
Small Adults	28-42 days	46.0-79.0 grams	4.5-6.0”	None/N.A.
Medium Adults	42-56 days	80.0-149.0 grams	6.0-8.0”	None/N.A.
Large Adults	56 to 70 days	150-265 grams	8.0-9.0”	None/N.A.

Extra-Large Adults	70 days+	266-360 grams	9.0-11.0”	None/N.A.
Extra, Extra-Large/Jumbo Adults	70 days+	Over 361 grams	11.0”+	None/N.A.

Rat

Mouse

	Age	Weight	Length*	Equivalent
Mice Pinkies	1-5 days	0.5-3 grams	0.5-1"	
Mice Fuzzies	6-13 days	3-6 grams	1-1.5"	Rat Pinky
Mice Hoppers	2-3 weeks	7-12 grams	1.5-2"	Rat Fuzzy
Weaned Mice	3-4 weeks	13-18 grams	2-2.5"	Rat Fuzzy
Large Mice	4-6 weeks	19-25 grams	2.5-3"	Rat Pup
X-Large Mice	6 months +	30 grams +	3" +	Weaned rat

Rats:

	Age	Weight	Length*	Equivalent
Rat Pinkies	1-6 days	3-8 grams	1-2"	Mouse Fuzzy
Rat Fuzzies	7-13 days	9-20 grams	2-2.5"	Hopper or Weaned Mice
Rat Pups	2-3 weeks	21-30 grams	2.5-3.5"	Large Mouse
Weaned Rats	3-4 weeks	31-45 grams	3.5-4.5"	X-Large Mouse
Small Rats	4-6 weeks	46-79 grams	4.5-6"	
Medium Rats	6-8 weeks	80-149 grams	6-8"	
Large Rats	8-10 weeks	150-265 grams	8-9"	1/2 lb Rabbit
X-Large Rats	Adult Rat	266-360 grams	9-11"	1 lb Rabbit
XX-Large Rats	Adult Rat	Over 361 grams	11" +	1.5 lb Rabbit

Feeder Rat and Mouse Sizing Charts.