

# The Rat

Comte de Buffon

*Classification, minute observation, and factual description are essential to scientific inquiry. Georges Louis Leclerc, comte de Buffon (1707- 1788), was a French naturalist recognized as a master of this genre. The following is an excerpt from his Natural History of Animals, Vegetables and Minerals, written in 1767.*

If we descend by degrees from the great to the small, from the strong to the weak, we shall find that Nature has uniformly maintained a balance; that, attentive only to the preservation of each species, she creates a profusion of individuals, and is supported by the numbers which she has formed of a diminutive size, and which she has denied weapons, denied either strength or courage; and that she has not only taken care that these inferior species should be in a condition to resist, or to maintain their ground by the abundance of their own number, but has likewise provided a supplement, as it were, to each, by multiplying the species which nearly resemble or approach them. The rat, the mouse, the *mulot*, or field-mouse, the water-rat, the *campagnol*, or little field rat, the *loir*, or great dor-mouse, the lerot, or middle dor-mouse; the *muscardin*, or small dor-mouse, the *musaraigne*, or shrew-mouse, with many others which I shall not enumerate here, as they are strangers to our climate, form so many distinct and separate species, but yet so little varied, that should any of the others fail, they might so well supply their places that their absence would be hardly perceptible. It is this great number of approximate species that first gave naturalists the idea of *genera*; an idea which can never be employed unless when we view objects in the gross, and which vanishes when we come to consider Nature minutely, and as she really is.

Men began by appropriating different names to things which appeared to them absolutely distinct and different, and at the same time they gave general denominations to such as seemed to bear a near resemblance to each other. Among nations rude and unenlightened, and in all infant languages, there are hardly any but general names, that is to say, vague and unformed expressions of things which, though of the same order, are yet in themselves highly different. Thus, the oak, the beech, the linden, the fir, the yew, the pine, had at first no name but that of tree; afterwards the oak, the beech, the linden, were all three called oak, when they came to be distinguished from the fir, the pine, and the yew, which in like manner would be distinguished by the name of *fir*. Particular names proceeded solely, in process of time, from the comparison and minute examination of things. Of these the number was encreased in proportion as the

works of Nature were more studied, and better understood; and the more we shall continue to examine and compare them, the greater number there will be of proper names, and of particular denominations. When in these days, therefore, Nature is presented to us by general denominations, that is, by genera, it is sending us back to the ABC, or first rudiments of all knowledge, and to the infant-darkness of mankind. Ignorance produced *genera*, and science produced, and will continue to produce, proper names; nor of these shall we be afraid to increase the number, whenever we shall have occasion to denote different species.

Under the generical name of rat, people have comprised and confounded several species of little animals. This name we shall solely appropriate to the common rat, which is black, and lives in our houses. Each of the other species shall have its particular denomination; for as neither of them couple together, each is, in reality, different from all the rest. The rat is well enough known by the trouble he gives us. It generally inhabits barns, and other places where corn and fruit are stored; and from these it proceeds, and invades our dwellings. This animal is carnivorous, and even, if the expression is allowable, *omnivorous*. Hard substances, however, it prefers to soft ones: it devours wool, stuffs, and furniture of all sorts; eats through wood, makes hiding places in walls, thence issues in search of prey, and frequently returns with as much as it is able to drag along with it, forming, especially when it has young ones to provide for, a magazine of the whole. The females bring forth several times in the year, though mostly in the summer season; and they usually produce five or six at a birth. They search for warm places; and in winter they generally shelter themselves about the chimneys of houses, or among hay and straw.

In defiance of the cats, and notwithstanding the poison, the traps, and every other method that is used to destroy these creatures, they multiply so fast as frequently to do considerable damage. In old houses in the country especially, where great quantities of corn are kept, and where the neighboring barns and haystacks favor their retreat, as well as their multiplication, they are often so numerous that the inhabitants would be obliged to remove with their furniture, were they not to devour each other. This we have often by experience found to be the case when they have been in any degree straitened for provisions; and the method they take to lessen their numbers is for the stronger to fall upon the weaker. This done, they lay open their skulls, and first eat up the brains, afterwards the rest of the body. The next day hostilities are renewed in the same manner; nor do they suspend their havoc till the majority are destroyed. For this reason it is that after any place has for a long while been infested with rats, they often seem to disappear of a sudden, and sometimes for a considerable time. It is the same with the field-mice, whose prodigious encrease is checked solely by their cruelties towards each other, when they begin to be in want of food. Aristotle attributes this sudden destruction to the rain; but rats are not exposed to the weather, and field-mice know well how to secure themselves from it, their subterranean habitations being never even moistened.

The rat is an animal as salacious as it is voracious. They have a kind of yelp

when they engender; and when they fight, they cry. They prepare a bed for their young, and provide them immediately with food. On their first quitting the hole, she watches over, defends, and will even fight the cats, in order to save them. A large rat is more mischievous, and almost as strong, as a young cat. Its foreteeth are long and strong; and as the cat does not bite so hard, as she can do little execution except with her claws, she must be not only vigorous, but well experienced to conquer. The weasel, though smaller in size, is yet a more dangerous enemy to the rat, and is more feared by it, because he is capable of following it into its hiding-places. The combat between these two animals is generally sharp and long; their strength is at least equal, but their manner of fighting is different. The rat cannot inflict any wounds but by snatches, and with its foreteeth, which, however, being rather calculated for gnawing than for biting, have but little strength; whereas the weasel bites fiercely with the force of its whole jaw at once, and instead of letting go its hold, sucks the blood through the wound. In every conflict with an enemy so formidable, it is no wonder, therefore, that the rat should fall a victim.

There are many varieties in this as in every other species of which the individuals are very numerous. Beside the common black rat there are some which are brown, and some almost black; some which are grey, inclining to white or red, and some altogether white. The white rat, like the white mouse, the white rabbit, and all other animals which are entirely of that color, has red eyes. The white species, with all its varieties, appears to belong to the temperate climates of our continent, and have been diffused in much greater abundance over hot countries than cold ones. Originally they had none in America; and those which are to be found there in such numbers at this day are the produce of rats which accidentally obtained a footing on the other side of the Atlantic with the first European settlers. Of these the increase was so great that the rat was long considered as the pest of the colonies; where indeed it had hardly an enemy to oppose it but the large adder, which swallows it up alive. The European ships have likewise carried these animals to the East Indies, into all the islands of the Indian Archipelago, as well as into Africa, where they are found in great numbers. In the North, on the contrary, they have hardly multiplied beyond Sweden; and those which are called Norway rats, in Lapland, etc., are animals different from our rats.