

## Question: चूहा पालतू जानवर है या जंगली जानवर?

### Answer by Rudrashis Chakravorty

From a historical point of view rats originally are wild animals – the two best-known modern-day species being the black rat (scientific name is *Rattus rattus*; also known as the ship rat, roof rat, or house rat) and the brown rat (scientific name is *Rattus norvegicus*; also known as the common rat, street rat, sewer rat, Norway rat, Norwegian rat, etc). These two groups together are called as the Old World rats or true rats, with their origins being in South and South-East Asia.

On the other hand, in today's Western World countries rats are also officially listed as domestic animal alongside other examples such as dogs, cats, cows, ducks, chickens, etc, thanks to there being two well-known domesticated varieties belonging to the species of brown rat (*Rattus norvegicus*): the fancy rat and the laboratory rat.

The scenario is somewhat different in India, which we will come to later.

But to answer our original question more systematically and satisfactorily, a good way to begin is to first look at a fundamental issue that is of importance here: How do we decide which rats – or for that matter any other animal living near human beings – to label as wild and which ones to label as domestic?

#### Wild animals versus domestic animals

To begin with, what is domestication? It is a relationship between two different groups of organisms which is deliberately maintained for generations after generations, where one of the groups slowly starts gaining more and more control over the care and reproduction of the other group and ends up having a significant power over these two processes. In return that second group (that is, the domesticated one) starts to steadily supply valuable resource material to the first group. This is a continuing process, i.e., there is no one definite moment in the history of a given domesticated species when it can be considered to have become fully domesticated.

Now, for any species of wild animal to be considered as having been domesticated with regard to the context of human beings, a few things need to happen:

First and foremost, any such domesticated animal should naturally be at ease with human beings around it, and can even become fond of human contact.

Secondly, and this is related to the first condition, there should be a significant reduction in the level of fearfulness, aggression, nervousness, and often, activity, in a domesticated animal under human presence, when compared with its wild counterpart.

Thirdly, domesticated animals should not be wary of approaching humans on their own.

At the root of all these changes one sees while comparing a wild animal and its domesticated variety, there actually lies a series of modifications in its genetic make-up, which then leads to all those behavioural variations. And often this is accompanied with a notable change in the physical characteristics of that animal as well.

So now, let's see if the choohey we generally see around us qualify as domesticated animals or not.

In India, we have a variety of animals we call 'choohey'. They include the most commonly seen black rat *Rattus rattus*, the lesser bandicoot rat (*Bandicota bengalensis*, a very large rat found in sewers, railway stations, etc), and several small mice belonging to the *Mus* genus including the common house mouse, the field mouse, etc.

Of all these, the most well known is the black rat.

#### Black rat in India – domestic or wild?

And the answer is no, the black rat has not been domesticated in India, or for that matter, anywhere else in the world. On the contrary, they cause serious problem for farmers here, because they eat many types of agricultural crops.

In fact the black rat is considered to be a complex pest, defined as one that can both damage and benefit the environment. In many cases after the black rat comes into a new area, some local animal species decline in number or even go extinct. This is because as the black rat can eat a wide variety of food and adopt well in difficult habitats, it strongly competes for resources after getting into a new area with other small animals that were already living there from before.

#### **Are other rats and mice domesticated?**

The lesser bandicoot rat *Bandicota bengalensis* again is not domesticated, though it has made its home in human habitats.

Mice such as *Mus musculus* are certainly wild animals, not domesticated. However, they do meet some of the criteria for domestication – their reproductive fortunes are linked to our well-being; they have been living in human habitats for over 15,000 years by now. And when kept at home from when they are just born, they get used to human contact and behave tamely. Mice have also been bred to be domesticated as in the case of breeds of the house mouse that you can see in pet stores and in laboratories. These mice are found in our country as well.

#### **To conclude.....**

I don't know what may now be your answer to the question of whether all choohey should be put in the category of domestic or wild animals. But perhaps we can all agree upon one thought: That whether wild or domestic, with the passage of time each kind has become wonderfully adapted to not only survive, but thrive in or near human habitats. In fact today rats can be found wherever human beings live on all continents, except for in Antarctica, and thus many argue that they are the most successful mammal on the planet alongside our own species.