**OXFORD UNIVERSITY**

Figures for 2021 shows number of animals that completed procedures, as declared to the Home Office using their five categories for the severity of the procedure

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Severity | Mice | Rats | Ferret | Guinea  Pigs | Rabbits | NHPs# | Pigs | Other  Rodents | Other  Birds | Xenopus | Zebra  Fish | Other  Fish | Total |
| Non  Recovery | 2966 | 232 | 2 | 41 | 0 | 1 | 1 | 28 | 0 | 0 | 162 | 0 | **3433** |
| Mild | 32691 | 157 | 0 | 14 | 0 | 0 | 3 | 131 | 7 | 0 | 5066 | 71 | **38050** |
| Moderate | 31074 | 309 | 6 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 214 | 0 | **31613** |
| Severe | 852 | 68 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 630 | 327 | **1880** |
| Sub  Threshold | 130415 | 422 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1378 | 0 | **132216** |
| **Total** | **197908** | **1188** | **9** | **55** | **0** | **13** | **4** | **159** | **7** | **1** | **7450** | **398** | **207192** |

# NHPs - Non Human Primates

\* Badgers are caught tagged and release for monitoring in wild as part of the work of the Wildlife Conservation Research Unit

Oxford also maintains breeding colonies to provide animals for use in experiments, reducing the need for unnecessary transportation of animals.

Figures for 2017 show numbers of animals bred for procedures that were killed or died without being used in procedures

|  | Total excluding those involved in creation of  maintenance of a GA line | Genetically normal animals as a result of creation of a new GA line | All animals (other than previously reported) killed for the maintenance of established GA lines | Total |
| --- | --- | --- | --- | --- |
| Mice | 8851 | 2000 | 23721 | 34572 |
| Rats | 762 | 0 | 0 | 762 |
| Xenopus | 59 | 0 | 0 | 59 |
| Zebrafish | 384 | 0 | 0 | 384 |

**Primates** are used because their brains are closer to human brains than mice or rats. They are used at Oxford in vital research into brain diseases like Alzheimer’s and Parkinson’s. Some are used in studies to develop vaccines for HIV and other major infections.

The primates at Oxford spend most of their time in their housing. They are housed in groups with access to play areas where they can groom, forage for food, climb and swing.

Primates at Oxford involved in neuroscience studies would typically spend a couple of hours a day doing behavioural work. This is sitting in front of a computer screen doing learning and memory games for food rewards. No suffering is involved and indeed many of the primates appear to find the games stimulating. They come into the transport cage that takes them to the computer room entirely voluntarily.

After some time (a period of months) demonstrating normal learning and memory through the games, a primate would have surgery to remove a very small amount of brain tissue under anaesthetic. A full course of painkillers is given under veterinary guidance in the same way as any human surgical procedure, and the animals are up and about again within hours, and back with their group within a day. The brain damage is minor and unnoticeable in normal behaviour: the animal interacts normally with its group and exhibits the usual natural behaviours. In order to find out about how a disease affects the brain it is not necessary to induce the equivalent of full-blown disease. Indeed, the more specific and minor the brain area affected, the more focussed and valuable the research findings are.

The primate goes back to behavioural testing with the computers and differences in performance, which become apparent through these carefully designed games, are monitored.

At the end of its life the animal is humanely killed and its brain is studied and compared directly with the brains of deceased human patients.  Primates at Oxford involved in vaccine studies would simply have a vaccination and then have monthly blood samples taken.

**No of primates held**

|  |  |  |
| --- | --- | --- |
| Year | Total number of primates held (number at mid-point of year) | Number of primates (as recorded in annual Home Office returns) |
| 2004 | 109 | 20 |
| 2005 | 109 | 22 |
| 2006 | 100 | 49 |
| 2007 | 99 | 39 |
| 2008 | 86 | 66 |
| 2009 | 98 | 49 |
| 2010 | 80 | 41 |
| 2011 | 55 | 22 |
| 2012 | 46 | 29 |
| 2013 | 41 | 45 |
| 2014 | 38 | 5\* |
| 2015 | 50 | 2\* |
| 2016 | 52 | 8 |
| 2017 | 54 | 7 |
| 2018 | 52 | 10 |

**The difference between ‘total held’ and ‘on procedure’?**

Primates (macaques) at Oxford would typically spend a couple of hours a day doing behavioural work, sitting in front of a computer screen doing learning and memory games for food rewards. This is non-invasive and done voluntarily for food rewards and does not count as a procedure. After some time (a period of months) demonstrating normal learning and memory through the games, a primate would have surgery under anaesthetic to remove a very small amount of brain tissue. The primate quickly returns to behavioural testing with the computers, and differences in performance, which become apparent through these carefully designed puzzles, are monitored. A primate which has had this surgery is counted as ‘on procedure’. Both stages are essential for research into understanding brain function which is necessary to develop treatments for conditions including Alzheimer’s, Parkinson’s and schizophrenia.

The University of Oxford used **272,206** animals for scientific purposes\* in 2017, including the following:

**Birds - 21 Fish- 4,236 Frogs - 214 Guinea pigs - 80 Mice - 264,212**

**Other Animals - 68 Pigs - 5 Primates - 7 Rabbits - 2 Rats - 3,361**

\*These figures include animals used in scientific procedures and those bred for regulated procedures but killed without being used.