R.A.S.C.A.L.S.

RATS ARE SWEET CUTIES AND LOVABLE SOULS

We Love our Rats ♥

The South African Rat Fan Club

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What are wild rats and what do they look like ?

For the purposes of clarity and raising public awareness, it has come to our attention that in some cases, domesticated Rattus Norevgicus (Rattus Norvegicus (Albinus) commonly known as "lab rats" and their descendants, are being released into the wild by either unethical or ignorant people. These rats have been domesticated since the late 1800's and cannot survive in the wild. They have no "fight or flight" response/instinct and are domesticated by a very long bloodline of domestication and selective breeding (they were originally bred for the ease of handling them in laboratories). If you should come across a rat that looks fattish and seems slow to respond to you or tame, please report this to us (if you can take a photo, that would be very beneficial). Rattus Norvegicus (Albinus) normally have a lot of white on their coat (can be combined with brown, grey or beige). They can even have an "agouti" (wild rat) colouring or be mainly black (sometimes with white "socks") but their responses will generally be substantially slower than a real wild rat's.

Below is a photo of a "hooded Agouti (wild rat colour)" domestic (pet/lab) rat :

Below is a photo of a "Black hooded" domestic (pet/lab) rat :

Wild rodent general Information

Rats and mice have been associated with people for hundreds of years. They live on our food and waste products and inhabit our buildings. Rodents can cause serious damage to structures, equipment, furniture, and utilities. These rodents are broadly known as "opportunists" meaning that they reproduce and disperse rapidly when conditions are favourable or when a disturbance opens up a new habitat or niche for invasion, as in the early stages of ecological succession. Changed environmental conditions from disturbances can allow opportunist species to gain a foothold. However, once established, their populations may crash because of changing or unfavorable environmental conditions or invasion by more competitive species.

Therefore, most opportunist species go through irregular and unstable boom-burst cycles in their population size. To survive, opportunists must continually invade new areas to compensate for being displaced by more competitive species.

Ideally, the best way to control mice and rats is to make it impossible for them to find any way to get into structures to nest or have access to food. It is good pest management (for both rodents and insects) for building owners to rodent proof the building as much as possible. Rodent survival depends on the existence of the following basic environmental factors :

- Food (garbage, wood, rubber, paper, pet food, bread thrown out for wild birds, bird seed, clothing)
- Water
- Shelter (rubble, deserted buildings, discarded household items, lots of long vegetation)

The 3 major mammalian pests to humans in South Africa :

1. The Roof rat (or Black ship rat)

Scientific name : Rattus Rattus

- Has a tail which is longer than the body.
- Is most active at night.
- Eats fruit, berries, snails, pet food and nuts
- Lives in ivy and other dense vegetation, also in garages, vacant buildings and cars and woodpiles.
- Climbs trees, walks utility lines and fences.

Roof Rat evidence may include chewing noises, rat droppings, chewed nut shells and snail shells and rub marks on inside walls.

Droppings will be evident in vacant buildings, vacant cars, garages and woodpiles.

2. The Norway rat

Scientific name : Rattus Norvegicus

- Generally lives underground in elaborate burrow systems.
- Also lives in basements or sewer systems
- Water must be readily available.
- Has a tail that is shorter than the body.
- Eats garbage, pet food and many other foods.

Comparative diagram Rattus Rattus versus Rattus Norvegicus

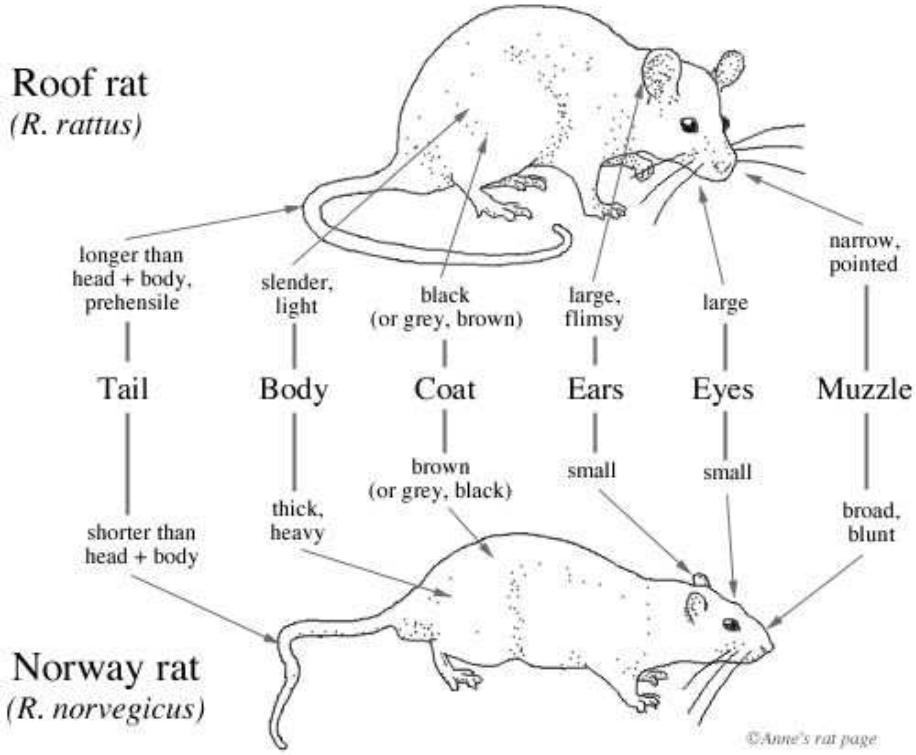

Diagram used with kind permission Anne Hanson PHd (www.ratbehavior.org)

3. Common House Mouse

Scientific name : Mus Musculus

- Tail is 3-4 inches (7-10 cm) long.
- Body is small and slender, 2 to 3 _ inches (7-10cm) long.
- Average weight is 18 grams to 28.35 grams.
- Lives within the house.
- Attracted to any accessible food such as pet food.

Long term and sustainable wild rodent control

To achieve long term rodent control is to eliminate their food and shelter sources as well as sealing all points of entry to buildings. The efficacy of poison/mass extermination alone was tested and documented in scientific tests conducted by DAVID E. DAVIS Division of Vertebrate Ecology, School of Hygiene and Public Health The Johns Hopkins University in 1953. Tests proved that sustainable wild rodent population control (specifically in the wild Rattus Norvegicus) was enormously reliant on sanitation and hygiene and the removal of the opportunity for food, water and shelter a fact re-enforced by the World Health organization and the Centres for Disease Control in the U.S. The removal of both shelter and food will have far greater impact than the short term success achieved by baiting or trapping. In the opinion of the

World Health Organisation and the Centre for Disease Control in the U.S., hygiene and sanitation are paramount to the success of wild rodent control.

Introduction of natural predators should also aid with the control of wild rodents. We believe that the introduction of owl boxes and managed sterilized and neutered feral cat colonies (in larger areas) should be seriously considered before the use of chemicals (this will protect the domestic animals and humans from accidental poisoning and will avert the health hazards posed by hidden dead rodent's decaying corpses). .

The following checklist has been developed to help you identify signs and factors contributing to a rodent infestation.

Signs of rodent colonies being in an area

- Presence of live or dead rodents
- Runways and rub marks that appear as a black greasy smear
- Tracks
- Burrows and nests
- Odours of urine and rodent hairs
- Gnawing
- Droppings
- Urine stains

Major factors contributing to the invasion of rodents in an area

Indoor factors

- Gaps under doors (if you can fit your fingers underneath, the gap is too big allowing the rodent access to your house)
- Openings in the wall (even small openings) around ducts or vents or doorframes
- Refuse not packed into steel drums or rodent proof structures
- Holes in roof access (for example cracked or missing roof tiles, holes between the eves and roof surface)
- Gaps under garage and storage area doors
- Cracked foundations or walls
- Foodstuffs left out and not packed into rodent proof containers
- Garden snails
- Fruits or vegetables not stored away
- Pet foods left out for access by pets for extended periods
- Windows that do not close completely

Outdoor factors:

- Bird feeders/feeding wild birds with bread
- Wild bird seed and bird aviaries that are not rodent proofed
- Overhanging tree limbs and unkempt garden foliage or long grass
- Wood piles
- Garbage cans and waste disposal areas (garbage should be packed into rodent-proof sealed bins) ****
- Open or broken sewers/ditches

- Pet food left outside (particularly overnight)****
- Water source (bird baths, ponds, leaky faucets, etc.)
- Fruit trees
- Open compost heaps
- Vacant cars or furniture not disposed of and left in area

Wild rodents and Public Health

Wild rats and mice have significance for public health chiefly due to their role as carriers or reservoirs for infections and diseases that may can be transmitted to humans (zoonoses).

The transmission of these infections to humans occurs by indirect or direct contact. Some are transmitted through contact with infected rodent urine or feces, others through fleas and lice, and still others through mosquito bites.

Management and control of wild rodent populations with pesticides

The W.H.O. says that steps to eliminate rodents should not be taken impulsively and haphazardly with the mass application of rodenticides. This measure takes time and money and exposes others (domestic animals and people) to an additional risk, which may be the chemical or biological components of the product. The indiscriminate elimination of rodents poses a greater risk, since the ectoparasites of these species, the vectors of the infections they carry, immediately seek out other hosts - among them humans - and transmit the infections to them. This is what happens with the plague and rickettsiosis.

Community participation in both rural and urban areas is fundamental for the prevention of infections carried by rodents.

A number of measures are recommended. Protect food from rodents. Insofar as possible, use containers (metal boxes, clay or ceramic pots with lids, silos). Large volumes of food or sacks should be placed on wooden benches in an orderly fashion to facilitate frequent inspection of the sacks.

Proper refuse and waste disposal. All materials that serve as a refuge for rodents - for example, cardboard boxes, idle machinery, wooden or brick troughs - should be removed from dwellings.

General hygiene and sanitation. Dark, humid rooms and areas are undesirable; ensure that they receive adequate ventilation and light.

The Centers for disease control emphasise (http://www.cdc.gov/rodents/prevent_rodents/index.htm)

- Seal up
- Trap up (mentions also introduction of natural predators)
- Clean up

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A large amount of information on rodent control and disease prevention is available on the C.D.C. website.
