Rodent Control Program

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The Rodent Control program was prepared by the Environmental Health and Safety (EHS) Department, in consultations with Campus Security, and Facilities Services departments. Please contact EHS at either 778-782-4978 or ehs_sfu@sfu.ca, to obtain additional information about the Plan.

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1 Introduction

This document outlines SFU’s Rodent Control Program. The program aims to enhance awareness of rodent hazards, communicate conditions that contribute to rodent proliferation, control strategies at Simon Fraser University and the role of SFU employees in rodent control.

Rodents can pose a serious threat to property and health. According to BC Health Files, rodents should be avoided – as should any food they may have come in contact with. Rodents can transmit diseases such as Salmonellosis, Murin Typhus, Lyme Disease, Hantavirus etc. However, BC Health Authorities also note that on the West Coast rodents tend to be more of a nuisance than a health threat.

Mice are well adapted for living year-round inside buildings. They are most likely to be noticed during winter following their fall migration indoors in search of warmth, food and shelter. Mice are excellent climbers. They have poor sight but excellent senses of hearing, smell, taste, and touch. Mice will only roam up to 9 m (29.5 ft) from their nest. Their favourite foods include grains, rolled oats, sugar, and raisins.

Rats normally live at or near ground level. They nest and burrow in the ground, under buildings, and in rubbish and other types of litter. They can climb, swim and jump very well. They have poor sight but excellent senses of hearing, smell, taste, and touch. Rats can roam up to 45 m (147.6 ft) from their nest. Their favourite foods include rolled oats, meat, fish, and vegetable oil.

The most effective control strategy is preventing the rodents from establishing nesting in indoor living environments. Once established, they breed rapidly particularly if food and water are available. Pest management experts advise that trapping combined with elimination of food, water, and hiding spaces is the most effective control strategy.

At Simon Fraser University, we use an Integrated Pest Management Approach. Mechanical traps are used indoors while rodenticides in the form of bait blocks, in tamper resistant locking bait stations are limited to outdoor use. Buildings are checked to identify and repair potential entry points. A key component to the University’s control strategy is employee assistance. We rely on occupants to report sightings of rodents and rodent droppings and use the reports to monitor status and target eradication efforts. Employees assist by keeping doors and windows closed to prevent entry, by reporting sightings of rodents and their droppings, by eliminating food and water sources, and by ensuring they do not handle rodents, rodent droppings and remains.
2 Health Hazards
Rodents can contaminate food and other areas with their droppings, urine and fur. Mice need only an opening of 6 mm (0.24”) and rats only need an opening of 12 mm (0.47”) to get through. These rodents are of concern because of the many serious diseases that are associated with them. They carry mites and fleas and spread diseases, such as Salmonellosis, Murin Typhus, Lyme Disease, Hantavirus etc. Mice and rats can be found almost everywhere. They are generally nocturnal animals and prefer narrow, concealed and out of the way routes when moving about. They tend to follow the same pathways but they are highly adaptable.

The key to preventing health hazards is exposure control. The routes of exposure involve, touching or ingesting contaminated materials, or inhalation of contaminated airborne particles. This means that we need to be on the alert for evidence of rodent infestation. The easiest way to identify rodent infestation is evidence of droppings. Mice droppings are black and rice-size whereas rat droppings are bean-size. Other signs of a rodent problem include:
- Burrows – fresh diggings around foundations and into walls;
- Runs – dust free “pathways” along otherwise dusty walls and floors;
- Gnawing Marks – on wood, concrete or other material; and
- Sightings – mice in daytime are common, rats in daytime indicate overcrowding.

At all times hands must be washed before handling food items. If there is evidence of rodent markings or droppings close to a food item, it should be disposed. Contaminated surfaces should be disinfected.

The handling and cleaning of rodent remains should be left to people who have been trained to prevent airborne contamination and follow safe working protocols. The protocols will vary depending on the situation and may include the use of disinfectants, gloves, and respiratory protection where airborne contaminants are anticipated.

3 Conditions that Contribute to Rodent Infestation
Construction activity contributes to disturbance of outdoor nesting areas. A decrease in the availability of food results in the search for new territory. When changes occur to a territory, rodents investigate the area for unclaimed space with a good food supply. Given that they are social animals, they live in colonies and therefore have a significant impact in their colonized environment.

Normally, the problem is worse in the fall as temperatures drop and food becomes scarce outdoors. The rodents move indoors to seek shelter, warmth and food. Our preference for fresh air and open windows provides an easy point of entry and bushy leafy plants located indoors provide excellent nesting and hiding grounds. Our normal practice of disposing food remains in garbage containers at our desks and food supplies in our desk drawers enriches their food supply and sustains breeding.
4 SFU Rodent Control Program

Simon Fraser University has an on-going rodent control program that aims to address infestation before it becomes a problem. The Rodent Control Program uses an integrated pest management approach that includes identifying the problem and developing an action plan for eradication and control. To identify the problem we look for:

- Physical sightings;
- Droppings and the smell of urine;
- Squeaking, scratching or gnawing noises in walls;
- Damaged food products;
- Burrowing around the exterior perimeters;
- Visible gnaw marks on wood, plastic, wire sheathing etc.; and
- Bad or foul smell.

Control program strategies vary and are adapted to each situation. The strategies include:

- cleaning and disinfecting the site to prevent further attraction;
- removing food and shelter;
- exterminating rodents via mechanical traps and rodenticides; and
- limiting access by rodent proofing.

A major content of the University program is a protocol for reporting rodent concerns.

4.1 Reporting Rodent Concerns and Evidence of Droppings

All employees are encouraged to immediately report sightings of rodents or rodent remains such as fur, droppings or urine. By reporting, the employees assist us in identifying the areas that require targeting. This targeted approach enhances the effectiveness of the rodent control program.

4.1.1 Burnaby Campus

During Office Hours – call the Facilities Services, service desk at tel. 23582 to request removal and clean-up of rodent remains or report sightings.

Outside Office Hours and on Weekends – call Campus Security at tel. 23100, request removal and clean-up of rodent remains or report sightings.

4.1.2 SFU Vancouver

During Office Hours – call the Operations Help desk at tel. 27891 to request removal and clean-up of rodent remains or report sightings.

Outside Office Hours and on Weekends – call tel. 25029 or dial “12” from a classroom or house phone to request removal and clean-up of rodent remains or report sightings.
4.1.3 SFU Surrey

Call tel. 27495 to request removal and clean-up of rodent remains or report sightings.

The service providers will strive to respond within two hours. If the rodent is in the process of dying, you can place a box or container over it to keep it from moving around. When you call for service, be sure to communicate if the rodent is dead or alive. In the meantime, do not disturb or touch droppings or dead rodents. As long as the material is not touched or disturbed, you will be safe.

4.2 Campus Security and Facility Response at SFU Burnaby

a. When receiving a call for service, clarify the nature of service required:
   • Removal of dead rodent
   • Removal of dying rodent
   • Removal of rodent droppings
b. Obtain location details, for example a public space with high visibility versus a remote corner.
c. If the rodent is dead, the service request can go to the Pest Management Contractor on site or to the Best Cleaning Contractor Supervisor.
d. If the rodent is or may be still alive, and Pest Management is not on site to respond, Campus Security will advise the Best Cleaning Contractor Supervisor and respond with a trained cleaning staff. Cleaning staff will confirm the status of the rodent by prodding it with a litter picker. If the rodent is alive, the cleaner will place a metal box on the rodent and place an emergency service request with Pest Management.

4.3 Safe Work Procedure for Clean Up of Rodent Infested Areas

During Office Hours while pest management staff is on site, they will remove dead and live rodents, rodent remains and disinfect the area using protocols developed by their employer (Pest Management Company). When pest management staff is not on site, removal of dead rodents and area disinfection will be done by specifically trained cleaning staff. However, if the rodent is still alive, it should be covered and contained until Pest Management can respond.

If infestation is wide-spread and general area disinfection is required, the University will contract with specialized cleaning companies who will disinfect the area, utilizing safe work protocols to protect the cleaning staff.

At SFU Burnaby, the resident cleaning company (Best Facilities Services Inc.) supports the activities of the pest management staff outside of office hours and on weekends. To provide this support, the company has designated and trained employees to respond to requests for rodent removal and disinfection.

4.3.1 Best Facilities Services Inc. Safe Work Procedures

For removing dead rodents, cleaning small quantities of rodent droppings and disinfection of the contaminated surface area:
   • Clear all unnecessary workers from the area
• Confirm the rodent is dead by using a prodding stick
• Ventilate the area by opening windows and doors
• Wear fit tested, disposable N95 respirator or HEPA filter cartridge respirator (check fit)
• Wear disposable gloves
• Wear eye protection
• Spray the debris with disinfectant (10% chlorine bleach) solution to soak the material. Avoid generating a stream of liquid—this may create aerosols.
• Scoop the material. Dispose of all contaminated material in double plastic bags and handle in a manner that will prevent punctures. Contaminated material may be disposed with regular waste.
• Wipe or mop surface the area with a solution of disinfectant and detergent.
• Remove potentially contaminated clothing and place into a plastic bag for disinfection, wet-wipe rubber footwear and safety glasses with a disinfectant solution, remove gloves and respirator, and dispose into a plastic bag.
• Wash hands thoroughly using lots of soap and water.

For Live Rodents
• Clear all unnecessary workers from the area.
• Confirm the rodent is alive by using a prodding stick.
• If the rodent is alive, place the designated metal box over the rodent.
• Request Pest Management service – If the area is high visibility, the request should be for emergency service response.
• Arrange for the box to be decontaminated.

4.4 Communication with Occupants
Employees are kept informed via their supervisors and encouraged to report evidence of rodent presence. Depending on the situation, Environmental Health and Safety staff and Facilities Services staff will meet with individual employees or employee groups to review the situation and address concerns. Environmental Health and Safety also publishes information on their web home page to communicate reminders and status updates.

5 The Role of SFU Employees in Rodent Control
Employees are reminded that they are a key component to the success of the University Rodent Control Program. Their reports of sightings are critical to target control initiatives and their cooperation with keeping food remains out of desk garbage containers and properly store food (tightly lidded containers) in their desks goes a long way to eliminate the food source and therefore the appeal of the site to rodents.

Employees are also reminded that as a health precaution, they are not to touch dead or live rodents or rodent droppings. If the rodent is in the process of dying, employees may place a box over it, while waiting for a service response.
6 Program Monitoring and Review

All service requests and sightings are documented. The Pest Management Company provides reports of services rendered. The service requests and service reports are used to evaluate status of rodent infestation and to target areas with increased populations. Strategies for rodent control are reviewed and revised as necessary. Where problem areas are identified, services are ramped up and, when indicated by the conditions, extraordinary area disinfection is undertaken.