



Rodent management in storage and warehouses

Food and farm products all over the world need to be stored to keep over time. This ranges from storage in grain sacks at the household level, to large warehouses at the industrial level, and everything in between. Keeping storage places free of rodents is important for economic and health reasons. Hygiene codes and health legislations and regulations must be met. According to the Food Safety Magazine, storage rodents present the biggest problem in food processing and storage facilities. Each year, rats contaminate and destroy enough food worldwide to feed 200 million people.



a. STORAGE RODENT MANAGEMENT

Rodent management in storage needs a holistic approach. Single measures generally will not work, but implementation of parallel actions will provide better results. The starting point is to analyse the entire environment of the storage area, storage structures and existing management methods and understand how these affect the ecological requirements of rodents. It is based on this analysis that measures such as habitat manipulation, storage building modifications, improved storage practices, enforcement of strict hygienic and sanitary measures, and mechanical management are implemented to ensure adequate, effective, and long-term management of rodent populations.

b. CORE PRINCIPLES

In Rodent Green, we implement the principles of Economic Injury Level (EIL) and Hazard Analysis Critical Control Points (HACCP). Economic injury level (EIL) helps to determine when to take measures to inspect, control, and monitor rodents to prevent serious economic losses. A delayed response generally brings the risk that the rodent population has seriously expanded, even becoming an infestation, which will increase the cost of management measures. Hazard Analysis and Critical Control Point (HACCP) is recognized worldwide as a reliable system for ensuring food safety. HACCP is used during all steps of food production – from the primary production of the ingredients to the consumption of the finished product. It is a systematic approach to food safety that focuses on the prevention of contamination. These contaminations can be of biological, chemical, or physical nature.



c. RODENT GREEN STORAGE MANAGEMENT APPROACH

In Rodent Green, we follow an Ecologically Based Rodent Management (EBRM) approach. This combines habitat management with an array of proven, effective, ecological, and biological management methods. We work intensively with our clients, in this case often storage managers and farmers. It ultimately is the responsibility of managers to sustainably control rodents in and around storage areas. We can support this by planning and helping implement the appropriate prevention and control measures and the creation of awareness and knowledge, and the development of skills among the staff and other responsible parties through training.

- Inspection of rodent signs (droppings, smears, damage, gnawing, cadavers, other activities), visually and with sensors, and assessing rodent species and occurrence with special traps and night cameras
- Drawing up an action plan, including preventive and repulsive measures, adjustments to storage layout and surroundings, storage methods, control measures, choice of monitoring scheme, time schedule, and maps of areas of increased pressure
- Providing support to implementation of the action plan, including, if necessary, awareness and staff training
- Recording and evaluating the work done and presenting results
- Make recommendations to install routine rodent surveillance and management systems fitting to the clients' settings.

d. RODENT GREEN FOLLOWS THE FOLLOWING PROCEDURES FOR THE CONTROL OF RODENTS IN STORAGE PLACES:

- Stock taking interview with clients, establishing economic injury level
- Preparation of a plan for assessment and situation analysis
- Carrying out risk assessment including establishment of tolerance levels with special attention to address risks to humans, animals, and the environment, as well as to economic and health aspects resulting from the presence of rodents in storage areas
- Building inspection of storage premises – both warehouse and the surrounding terrain including fencing, ditches, vegetation, meadows, fields, waste dumps, ...

