

Song of the poison piper

Rodents obliterated in entire towns with techniques that may be used in U.S.

by Christopher Weathersbee



The Saxon town of Hamelin is finally free of rats—700 years after the Pied Piper was supposed to have done the job.

Hamelin is one of several dozen small towns in lower Saxony which have eliminated all resident rats and set up barriers against reinfestation.

The German example might be a model for action in the United States, where rats have only recently come under serious attack in many major cities—if Americans didn't share the rat's fondness for garbage.

The German program began on an experimental basis in the north German port city of Cuxhaven, starting about 10 years ago. The harbor area of the city, traditional focus of rat infestation, was ringed with bait stations. The bait was poisoned with the anticoagulant rodenticide warfarin. The area within this defensive ring was then saturated with similarly poisoned bait.

Poison was placed in docks and shipping areas, in sewers, anywhere rats might live and breed. Ships using the port regularly were cleared of rats and kept rat free. Other ships were ringed with bait to intercept any disembarking rats. All rats in the test area were wiped out and incoming rats were poisoned before they had infiltrated beyond the peripheral bait ring.

The Cuxhaven harbor area has remained clear of rats since the experiment began, even though the community of Cuxhaven still is infested.

The idea lay fallow for several years, until some three years ago the Lower Saxony Ministry of Public Health moved on a large scale. The program now is in full swing and has stimulated similar efforts in Denmark, England and India.

A report on the German system was delivered at the 19th annual meeting of the American Institute of Biological Sciences, held at the University of Ohio in Columbus, by Dr. William B. Jackson, professor of biology at Ohio's Bowling Green State University. Dr.

Jackson toured the rat-free towns during the summer.

Dr. Jackson says America is a long way from being ready to try the German method. He emphasizes that the system depends on more than simple poisoning. Central to it is the necessity for good sanitation to eliminate rat food supplies. The northern German towns he visited, he says, already had good sanitation. To achieve it in America would require extensive community education.

"From a long-range point of view," he says, "poisoning alone is worthless. In six months or a year you will have to go out and poison a whole new population of rats."

Another drawback of the German system, as far as the United States is concerned, is that it is not practical for cities over 50,000 population—the defensive ring becomes overextended, for one thing. In America the worst rat

problems are encountered in major cities.

However, some specialists see the system as useful if modified to provide rat-free neighborhoods, if not rat-free cities.

The most generally successful rat poisons are those containing anticoagulants such as bishydroxycoumarin. If eaten in large quantities over a period of a week or so these poisons cause internal hemorrhage. The rat's lungs fill with blood and it drowns.

The anticoagulants are safe for pets since enough to kill a rat is not enough to make larger animals sick, even if they should have access to the bait.

One drawback to anticoagulants is beginning to show up in Europe and elsewhere. Some rats appear to be developing growing immunity to them. In such cases stronger poisons must be used. These kill with one dose, but their greater toxicity makes them more dangerous to other animals. In addition, the rats, which are finicky eaters, learn to associate illness and death with the bait because the poison acts so quickly. They soon stop eating it.

Recently various anti-fertility agents have been tried on rats, but there has not yet been enough experience with them to gauge their effectiveness.

Dr. G. J. Love of the U.S. Public Health Service agrees with Dr. Jackson that because of poorer sanitation practices America has some distance to go before it reaches the German starting point.

Furthermore, Dr. Love points out, pest control in the United States traditionally is the responsibility of the tenant or property owner. If the Federal Government becomes involved in rat control in any way besides giving advice, it will be only to eliminate rats in those ghetto areas where the capacity to fight the pests does not exist.

If any Federal eradication program in the ghettos is successful, Dr. Love says, the German system might be drawn on to keep the pests at bay.



Lobsenz

A garbage lover, like Americans.