HOUSEKEEPERS: CHAT

Monday, October 12, 1931

## (NOT FOR PUBLICATION)

Subject: "Cur Enemy, the Rat." Information approved by the Bureau of Biological Survey, U.S.D.A.

Bulletins available: "Rat Control," "Red Squill Powder in Rat Control", and "Rat Proofing Buildings and Premises."

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"Three guesses," said Uncle Ebenezer. "What is mankind's greatest animal enemy?"

"I know," said three-year-old Ann. "Bears!"

"Guess again."

"Tigers," suggested Horace.

Uncle Ebenezer shook his head.

"Wolves?" inquired Betty Jane. "Well, then it's some ferocious great big animal I've never heard of."

"Ferocious is right," said Uncle Ebenezer." But compared to bears and tigers these animals are small."

"Please tell us what they are."

"Rats," said Uncle Ebenezer. "Brown rats and black rats. Just like those Horace saw out in Uncle Silas' barn. Shall I tell you what I know about wicked Mr. Rat?"

"Will it be a true story?" Ann asked.

"All too true. Mr. Rat is a great enemy because he attacks both man's purse and his health at the same time. Rats, you see, are not only thieves but they also spread germs of many diseases. I've read that before the war the United States estimated that rats cost agriculture more than a million dollars a year. That's a lot of money to go toward supporting an

unfriendly animal. Rats attack food in homes, fields, granaries and ware-houses. They appropriate fabrics like carpets and laces for their nests. And they increase rapidly and spread far. A single couple of rats may in three years increase to 359 million. And it only takes four month for a rat to become fullgrown. Some people say that there are as many rats living in this country now as human beings."

Uncle Ebonezer stopped for breath. Little Ann looked a bit puzzled. So many facts were almost too much for her tender years. But Horace and Betty Jane were much impressed.

"Where did rats come from in the first place?" Horace inquired.

"Well, nobody knows for sure but it is generally thought that they were natives of central Asia. They were unknown to the Greeks and Romans, so they apparently hadn't started traveling at that time. But I've been told that along in the early Christian period they took to migrating westward. The black rat was in Europe by the beginning of the 16th century and the brown rat was there a century later. It wasn't long before these rats were pretty well spread over Europe. And they were the carriers of the germs causing the horrible bubonic plague known as the Black Death, that caused so many deaths during the Middle Ages."

"But," said Horace, "how did all these rats get across the ocean to America?"

"Just the way people did. They came on ships. Rats are great travelers. A vessel stocked up with supplies of available food naturally makes a happy home for them. During the last two centuries, with the increase of commercial transportation, rats have been crossing the seas and being carried to the farthest corners of the earth. Many countries have put on rat killing campaigns because these animals came to be such a danger to health and such an expense. Twenty million rats were killed in Great Britain in one week. back in 1924. Economists estimated that each rat at large cost his human neighbors somewhere between \$1.25 and \$1.50 every year. You see how expensive it is for any country to support these pests.

"As long as they have food and shelter, rats seem to be able to live in any country or any climate. They are well adapted by nature to get along in this world. They have such strong teeth that they can gnaw very hard substances like wood or lead pipes either for food or to make their way to food. They are hardy, sly, fierce, and have no small amount of intelligence. They detect danger easily and are very cunning about avoiding it. Because of their delicate sense of smell it takes a good deal of skill to poison or trap them. Professional rat catchers, for example, have to be very careful that the smell of their hands does not get on the trap for the rat will be quick to scent danger in that case."

"Well, Ebenezer," remarked Cousin Susan, who had been sitting back in her chair in the corner all this time, quietly listening, "why don't you tell us about getting rid of these disgusting animals? I feel like joining a rat killing crusade myself after hearing all you've been telling."

"That's the spirit," said Uncle Ebenezer." As a matter of fact there are some modern Pied Pipers at just this work. The Bureau of Biological Survey is going at it scientifically to banish the rat population. During the

last three years, these scientists have assisted in more than 150 cooperative county, city and town antirat campaigns. Public spirited organizations like women's clubs, home bureau, farmer's organizations, and even boy scouts and 4-H clubs have cooperated in big rat wars."

The first important step in controlling rats is to deprive them of both shelter and food. All new building should be rat-proofed so that rats cannot find their way into them as they have been able to do in many old buildings. All shelter for rats should be removed and any opening through which they can gain entrance to any building should be closed.

The second important point is to dispose promptly of all garbage, trash and other waste on which they can feed and to keep stores of food in rat-proof places. The rats themselves may be destroyed by poisoned baits.

One of the surest ways to permanent rat riddance is the removal of favorable rat houses. Rats do not remain unless some safe and comfortable shelter is available where they can make their homes and raise their families without fear of being disturbed. The most common rat harbors are the dead spaces within double walls and beneath floors.

I'm not going to go into details here as to how to stop up an old building against rats because it is all clearly explained in a bulletin called "Rat Control". The bulletin not only gives helpful details but it also has pictures to tell the story - illustrations of rat proofing, trapping, fumigating and so on.

In cities the new steel and concrete constructions tend to keep the pest down. But farms give rats great advantages. In fact, I imagine that most ambitious rats find country homes excellent for raising their children and grandchildren. There is generally more food and it is often easier to get and the many farm buildings offer shelter.

Wooden floors in buildings without basements provide a free shelter for rats. Where possible such floors should be replaced by concrete with walls expending two feet underground to prevent these animals from burrowing under the floor from the outside. Other common rat shelters are made by stored produce and supplies, lumber piles, and accumulations of trash and refuse. Thorough cleanliness and orderliness discourage rats and force them to seek other quarters.

Then, naturally, rat families can't prosper very well when there isn't any food available. If rats are to be healthy and happy they have to have their minerals and vitamins and fats and carbohydrates and proteins like all the rest of us. Of course, they don't have to have their food served in style. They enjoy it from an open garbage pail as well as from the kitchen shelf or in the poultry yard or the pig pen. What they ask is simply plenty of food in places where they can get at it. Food shortage limits the number of rats that will stay on the premises and reduces their breeding. Also it renders poisoning and trapping more effective. So store foodstuffs in ratproof buildings, rooms or containers and dispose of waste and garbage in tightly covered receptacles.

The rats themselves may be killed in various ways. If there are only one or two newcomers, traps may do for them. Of course, promptness in dealing

with the first few will prevent later troubles with numbers of rat children, aunts, uncles, and cousins. When there are many rats to deal with, poisoning is the best method.

Don't depend on the household pet cat either, say the scientists— especially if pussy is well fed. In that case she's likely not even to blink an eye at Mr. Rat. Of course there are certain kinds of cats and also dogs that by breeding and training are good ratters. There was the famous cat of Dick Whittington's, for example. In general, however, even when the cat is willing to do a little killing, the rats will increase much faster than the cat can catch them.

Over in the laboratory at the Bureau of Biological Survey, a cat lived in a cage with four rats perfectly amicably for four weeks and made not even a move toward her room mates.

Though there are many poisons that will kill rats, most of them will also kill domestic animals and poultry as well, Baits get for rats are therefore often dangerous to dogs, cats, chickens and even children. So the scientists suggest the use of red squill powder, which will destroy both rats and mice but is relatively harmless to human beings and domestic animals. This is the poison that was used so successfully in the recent rat campaigns I mentioned a moment ago.

Some day soon we'll discuss the problem of house mice. But there isn't time today. Also there isn't time for me to give you the Monday menu. If you bring your pencils tomorrow, I'll promise to bring a fine menu and the best recipe you ever saw for squash or pumpkin pie.

