#### RATS!

#### "Rats!

They fought the dogs and killed the cats, And bit the babies in the cradles, And ate the cheeses out of the vats, And licked the soup from the cooks' own ladles, Split open the kegs of salted sprats, Made nests inside men's Sunday hats, And even spoiled the women's chats, By drowning their speaking With shrieking and squeaking In fifty different sharps and flats."



**13TH CENTURY DRAWING OF A PIED PIPER** 

- "The Pied Piper of Hamelin," Robert Browning

Thinking back over the whole time of my childhood, I recall no encounters with rats — mice aplenty, but not rats. Surely there must have been rats (their numbers and inhabited places on the planet rival humans). If there were encounters, you'd think they would have made an impression because the *existence* of rats made an impression on me. As I recall, it was the typical impression that merges medieval belief — rats are creatures of evil, lapdogs of the devil — with modern warnings — filthy habits and aggressive behavior toward us. Their aggressive behavior was particularly aimed at the very young and the very old (the most vulnerable of us, making rats even more terrible).

An early notion of rats came from my grandmother sitting on her Davenport sofa where she read aloud nineteenth century collections of fairy tales (see "A Fairy Tale Ending"). She also had a fondness for poems, especially if, as she put it, "there's a good moral to it." Browning's poem, "The Pied Piper of Hamelin," was a poem with a moral. Sometimes she read it instead of a fairy tale, even though *Grimm's Fairy Tales* has its own tale of the Piper. She was partial to parables and moral tales she believed had withstood the test of time.

Grandma was, in many ways, a nineteenth century Danish woman in 1950s America. She cooked my porridge on a wood-burning cast iron stove with a big decorative medallion on the oven door and tapered legs that held it up from the kitchen floor. At the insistence of her children a large oil-burning space heater been installed in her living room. She gathered eggs from a back yard hen house, and had churned her own butter for many years before agreeing that she could buy her butter and devote that energy to something else. She was a pious woman, who saw the outside world (outside of our small Mormon towns at the edge of the Utah desert) as a place where missteps were abundantly possible, and for every misstep we would have to "pay the piper."

That was one of her takeaways from Browning's poem. It made sense to me. It seemed consistent with our religious principles to be of service and known by your good works, and with what little I understood about law, ethics, and medical science in the outside world. You were accountable for your choices.

The Pied Piper of Hamelin is a widely known medieval tale, variously told, and possibly reflecting actual historical events in Germany ("pied" refers to a multicolored coat or costume). It was first retold in English in *Restitution of Decayed Intelligence*, an early seventeenth century work extolling the Saxon virtues of the English people.

"There came into the town of Hemel an odd kind of companion, who, for the fantastical coat which he wore being wrought with sundry colours, was called the Pied Piper."

The basic story can be told something like this. In the thirteenth century, a small German town is plagued by rats — lots of rats. The public demands action but the Mayor and the his council, mostly merchants, don't act. A gangly stranger in oddly colored clothing — "the strangest figure" — comes to town. He offers to get rid of the rats if the Mayor will pay him handsomely. The mayor agrees. The stranger plays bewitching music on a pipe and walks out of town. The rats follow him to the Weser River where he lures to them drown, except for one rat that swims away to warn his family about the Pied Piper (which may account for the notoriously suspicious nature of rats).

When the Piper returns to town, the Mayor refuses to pay up. The angry Piper threatens revenge, but the townspeople back their mayor and give up only a few coins, far short of the bargain. The Piper leaves but returns another day — St. John's Day — and again plays his mysterious pipe. This time all the children cheerfully follow him out of town and disappear for good. A boy too lame to keep up warns the grown-ups that the children have been taken, and then turns his attention to his regret at not having glimpsed whatever the Piper's song promised. By some accounts, a deaf boy was also left behind because he could not hear the music, and a blind boy because he could not see to follow.



THE PIED PIPER LEADS THE CHILDREN OUT OF HAMELIN

In Browning's version, the Mayor and Council watch helplessly.

"The Mayor was dumb, and the Council stood As if they were changed into blocks of wood, Unable to move a step, or cry To the children merrily skipping by, Could only follow with the eye That joyous crowd at the Piper's back."

Accounts vary as to where the Piper led the children — into the same river as the rats, into a mountain side cave, or over the mountain into another land. Browning has them taken to a cave, at least for awhile, and then possibly on to Transylvania. In any case, the children are never seen again.

Grandma read Browning's poem to me more than once. Each reading, like the first one, emphasized the moral of the consequences of thoughtless or rash actions. In subsequent readings, she added more themes. For example, her dim view of civic authority, as opposed to her unshakeable fealty to religious authority, came out when she explained to me that the Mayor got himself into trouble messing with the Pied Piper in the first place. The Piper obviously had strange powers. The Mayor had set himself on a bad path. And when the Mayor and Council failed to deliver to the Piper what he had earned, they were counting on worldly power and authority to save them from retribution. In lasting sadness, they discovered the opposite to be true.

And there were lessons to be learned from the townspeople. Concerns with worldly goods, money, and power will pollute a person. She encouraged me to notice that even before the Piper showed up, the concerns of the Mayor and Council for the town did not flare up until after a public outcry, one solely concerned with material life rather than spiritual life. The town was left in unhappiness.

"Heaven's gate Opens to the rich at an easy rate As the needle's eye takes a camel in!" — "The Pied Piper of Hamelin"

When she finished the poem and closed the book in her lap, there was a final caution for me, the child. There will be plenty of pied pipers out there in the world, with bright costumes and pretty songs, but you must not foolishly follow somebody's lead into a strange land.

Decades after porridge and fairy tales on the sofa, I think Browning's poem might also be understood as a tale of artists and their relationships to the public. I might point out that the Piper is remarkable for his talent. He does his charming not with magic but with profound musical talent. The children are not *duped* by some darkness in his song, but rather *believe* in a wonderful world suggested by the power of art to evoke visions. Not only was the Piper betrayed in terms of money, but his art was not respected fully; it was treated as a tool. Grandma would have been taken aback by this interpretation.

However, I hope she would approve of my life-long appreciation of the wisdom of the old tales, if not necessarily my interest in the rats among us. She did not talk to me about the rats in Browning's poem, apparently seeing no moral in their fate. They were assumed to be verminous creatures of low-standing, a scourge for the townspeople, and had probably brought a plague (some historians dispute that the plague ever struck Hamelin). The instructive themes of the poem did not bother with whether or not rats should be drown, and that was likewise not a question in modern times. They were still pests around the farm. After a hiatus of several years, Poe's *The Pit and Pendulum* was my next literary encounter with rats. It was assigned reading from Mrs. Gregersen, our school's English teacher, whose hair fit around her face like three sides of a square. Her eyeglasses always sat properly high on her nose. The tale supported my growing perception of rats as unambiguously sinister and profoundly menacing in groups, which was nearly always how they would appear — or so I believed.

"They pressed — they swarmed upon me in ever accumulating heaps. They writhed upon my throat; their cold lips sought my own; I was stifled by their thronging pressure; disgust, for which the world has no name, swelled my bosom, and chilled, with heavy clamminess, my heart..."

(The rats, of course, were heroic. They set the prisoner free when they gnawed through his bonds. That was less persuasive.)

Some years after that came college, and George Orwell's *1984*. The novel's hero, Winston, is threatened with torture by totalitarians. They will place his face in one end of a narrow cage with a hungry rat at the other end. He is given the choice of letting the rat eat his face or the face of a woman he loves.

And there was Jerzy Kosinski's *The Painted Bird*, a tale of a child wandering in a savage world. Anthropomorphic rats run through the pages like characters themselves.

"...sometimes they attack the eyes first, sometimes they burrow through the cheeks and devour the tongue." - 1984, Winston's inquisitor

"His face and half his arms were lost under the surface of the sea of rats and wave after wave of rats was scrambling over his belly and legs." — The Painted Bird

Following soon was a movie, *Willard*. Ben, a cunning and deadly rat with a pack, becomes a friend for the awkward Willard; killing Willard's lousy boss in what the rat sees as a vengeance due. Unwisely, Willard rejects his friend, putting him outside the bedroom and then out of the house altogether, trying to seal off every possible entrance against the return of the rats. (In such scenarios, rats nearly always prevail.) Ben and his pack regain entry, disrupt a romantic dinner, corner Willard, and eventually devour him as he cries out "I was good to you!"

# Of Rats and Men

"... everything that happens in the human life takes place in the two years or so of the rat's life." —MORE CUNNING THAN MAN. A Social History of Rats and Men, Robert Hendrickson



Humans and rats have been inseparable for a long time. Rats represent more to us than just another animal. They are darkly fascinating, often a creature of our nightmares. Many of us believe rats are evil, guileful, mysterious, and capable of almost unfathomable destruction. We fear infestations — countless rats — and the diseases they carry — like bubonic plague, the Black Death. We fear they will devour our crops, perhaps even us; bite our infants; disfigure our noses; start fires in our houses; and even fall from the sky.

In 2014, Robert Sullivan published *Rats: A Year with New York's Most Unwanted Inhabitants,* and appeared on the NPR's *Fresh Talk* to discuss rats with host Terry Gross. He described our relation with rats as "unending and brutish war." He found an alley in New York, where waste from restaurants, bars, and apartments reliably afforded rats "a multi-cultural diet," and made detailed observations. He had a purpose:

"I went to the rat-filled alley to see the life of a rat in the city, to describe its habits and its habitat, to know a little about the place where it makes its home and its relationship to the very nearby people. To know the rat is to know its habitat, and to know the habitat of the rat is to know the city."

Our fear of rats is not entirely irrational. Throughout history, rats have done more harm to man than any animal except man himself (tens upon tens of millions of people have died in plagues carried to them by rats, for example). They urinate and defecate in places where we keep food and clothes. They go out when it's dark. They swarm. They gnaw through electrical wires and start fires. Some estimates are that 20% of the world's crops are destroyed by rats, and if those crops could be saved, millions of hungry people could be fed. There are also stories of love, like the many Rat Ladies. After complaints from neighbors, police or other authorities have extracted women from homes where rats shared dinner tables, furniture, beds, and hallways with them — sometimes hundreds of rats had to be exterminated. Television crews have covered the extractions. The police in Miami were chased back into the street by swarms of perturbed rats — "I've been a cop for 25 years and I've never seen anything like this." The lades tell far different stories — "They're just as affectionate as kittens" or "It's not rats but people that bother me. I wish you'd all leave me alone."

In some cultures rats are worshipped and enjoy protected status. People house, feed and befriend them. In the 1970s, a Mississippi legislator introduced a bill to make the wharf rat the official state animal. The bill failed.

Some of us keep a rat or two around as pets. A friend has told me how she mourned the death of her rats, Patsy and Juliet, who had been company and comfort for her in a time of great stress in her life.

And there are many tales. Robert Hendrickson reminds us of them in his book.

No doubt you have heard of rats who	
desert sinking ships. People still speak	"Averting
of it. The metaphor was first used	The cup of sorrow from their lips
nearly 2000 years ago by Pliny the	They fly like rats from sinking ships."
Elder, Roman author and natural	- "Epistle to Mr. Nugent," Jonathan Swift
philosopher. He wrote in Naturalis	
Historia that "when a building is	
about to fall down, all the rats desert it."	

In *The Tempest,* Shakespeare described the boat on which the duke and his infant daughter had been set adrift as so unseaworthy that "the very rats instinctively have quit it."

There is a simple explanation. When a ship takes on water it is in the lower decks, where rats make their home. Historically, efforts to keep rats off ships were not terribly successful. Rats figure in the journals of many great sailors. Captain Cook unintentionally brought them to the South Seas. Even today, rats are a troublesome presence on ships. A rat guard is installed on ropes that connect a quay and a ship, preventing rats (as well as snakes and cats) from boarding.

Sometimes, we're told, rats come pouring down. In 1969, farmers on an Indonesian island insisted "They fell from the sky." The rats came down in bunches of seven (precisely seven, apparently) and "spread out across the land." Once on land and on the move, the cry went out, "The rats are coming!" — and devastation of crops began. What's more, the rats were led by a "white King of rats as large as dog." And he was cunning: "He knows when we plan to harvest. If we plan in secret to harvest tomorrow, rats will eat the crops tonight." It's not the only story of "rat showers."



A SHOWER OF RATS, COME TO EAT CROPS

Nor is that story the only reference to a king rat, a larger and more pale leader of his followers. A Swiss zoologist first mentioned such a creature in *Historia anamalium* (1558): "Some say that the rat, in his old age, grows enormously large, and is fed by the younger rats; it is called a King Rat." Sewer workers in large cities have claimed to have seen king rats guarded by other white rats. One story insists the guards stole red cloth and fashioned a robe for their king.

Martin Luther once called the Pope "the king of rats" and Catholic cardinals a "rabble of rats." Monasteries were, in his view, "rats' nests."

Sometimes rats deliver justice. A medieval legend told of a cruel nobleman who mercilessly cornered the market on wheat during a famine and watched many people die. Rats, also hungry, invaded his tower, ate his wheat and him as well. In another tale, a Bishop wished to withhold wheat from the poor during a famine. He locked them all in a barn and burned them alive in order to avoid sharing scarce food supplies. But the rats came, driven by hunger themselves, and devoured the Bishop and all his grain — ate him "clean to the bone."



EATING THE HOARDED WHEAT

Rats have been put on trial, even officially banished from nations. Until the late eighteenth century, rats were under the jurisdiction of ecclesiastical courts. A summons was read wherever an inundation of rats appeared. It contained full descriptions of the "filthy animals." When the rats failed to appear, it was a attributed to Satan, who permitted them to "tempt and annoy mankind."

A celebrated French lawyer won his first laurels as the court-appointed defender of the rats. He first argued they were summoned too hastily, and then that they were not accorded due process when they were not assured safe passage past "evil-disposed cats" as they came and went for their day in court. The court agreed, and adjourned the rats' appearance *sine die*.

These tales may seem less remarkable if you consider how much rats and humans have in common. We're both omnivorous and adaptable to all climates. We display ferocity, tend to migrate from east to west, are irresponsibly fecund, make genocidal war on our own kind, and can be utterly destructive. Neither of us seem to have much use for other species except for our own purposes, yet we can show great compassion toward our own kind.

In his book *On Aggression*, Konrad Lorentz suggests "the difficulty of effectively combating the most successful biological opposite to man, the Brown Rat, lies chiefly in the fact that the rat operates basically with the same methods as man, *by traditional transmission of experiences* within a community."

Rats are programmed to survive. That became clear to scientists investigating the effects of post-war atomic bomb testing in the islands of the Pacific. They found the islands scoured of life and completely contaminated by radioactive fallout marine animals, plant life, and the soil itself were all profoundly affected. Yet the rats survived. In fact, they thrived: "Not maimed or genetically deformed creatures, but robust rodents so in tune with their environments that their life spans were longer than average."



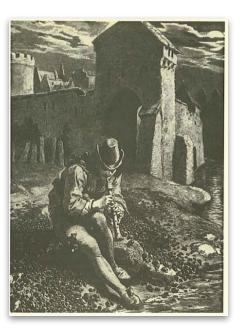
ATOMIC BOMB TEST, ENEWETAK ATOLL

Should we finally decide to eliminate ourselves from Earth in a nuclear war, rats will likely fill the gaps. Many biologists would likely say it will be so.

### Rattenfängers

Rattenfänger translates as "ratcatcher."

Johann Wolfgang v. Goethe published the poem *Der Rattenfänger* in the early nineteenth century, and it was later set to music by various composers. Perhaps it should not be so surprising that the ratcatcher was still alive and well in Hamelin, Germany, in the twentieth century. In the 1980s, Wilhelm Klimasch was a public works employee of the city, patrolling alleys and sewers to keep the city's rats in check.



I am not sure if Mr. Klimasch is still on the job, but actors in colorful outfits are. They help maintain Pied Piper of Hamelin festivities for tourists and townspeople. They also appear at hundreds of public events, openings of new buildings, and even offer tours of the town.

Elsewhere, there have been plenty of city ratcatchers. For example, in the Middle Ages in Germany, Jews often served as ratcatchers in exchange for an exemption from restrictions that applied to the majority of Jews. Ratcatcher guilds were well-known in Europe. The members wore uniforms and carried flags as advertisements of their services, and were honored citizens in their towns.

Conversely, the plague-stricken Philistines apparently had no ratcatchers. They encouraged returning the Ark of the Covenant to Canaan, with its "images of your mice that mar the land."

Greeks put their faith in Apollo, who could kill swarms of rats with his arrows (but was not above sending rats against those who neglected duties). More poetically, the Irish believed rats could be dispatched from a town by cursing them in rhymed verse. Perhaps the rat's greatest enemy has been Mao Zedong. On his orders, an estimated one and one-half billion rats perished in China.

Historically, dogs and cats have been among our finest ratkillers. During the Great Plague of London in the seventeenth century, dogs were thought to be carriers of the plague. They were killed in the tens of thousands. In the later centuries, blame shifted to rats and dogs redeemed themselves as prized ratkillers. Ratting matches became a popular sport. Dogs were loosed in a pit full of rats to see which dog could kill the most rats in the shortest time. In the nineteenth century, a bull terrier in London set the record at 500 rats in one and a half hours. Even after the matches were outlawed, books about dogs continued to praise the bull terrier for its ratting prowess.

Fredrick the Great preferred cats, and made them the official guards of his military food supplies. The Industrial Revolution finally pushed cats forward as the premier ratcatchers in cities with heavy infestations. Around the world, stories emerged of boatloads and planeloads of cats delivered to aid in a war against rats. In Bolivia, an outbreak of typhus was associated with an abundance of rats. Cats, in abundance, were called in to deal with the rats.

Nevertheless, many sewer workers have been skeptical. They consider the cat overrated as a ratkiller. A New York City worker scoffed that "A full-grown rat will rip the hide of any cat." The Humane Society urged New York City officials to not introduce cats as a way to combat Manhattan's rat problems: "Thousands of stray and starving cats…have already demonstrated themselves ineffectual in the war against rats." Sewer workers and New Yorkers are partial to combat metaphors when it comes to talking about rats.

In a journalistic piece for the *The Guardian* — "Man v rat: could the long war soon be over?" — Jordan Kisner addresses the latest in rat control. But first she puts to rest a few persistent misconceptions.

"First, the myths. There are no 'super rats.' Apart from a specific subtropical breed, they do not get much bigger than 20 inches long, including the tail. They are not blind, nor are they afraid of cats. They do not carry rabies. They do not, as was reported in 1969 regarding an island in Indonesia, fall from the sky. Their communities are not led by elusive, giant 'king rats.' Rat skeletons cannot liquefy and reconstitute at will. (For some otherwise rational people, this is a genuine concern.) They are not indestructible."



**ILLUSTRATION FROM THE GUARDIAN** 

That, says Kisner, is "the good news." What are not myths are the shadow cities of rats just underneath us, and that twenty feet or so away from you, in cities at least, rats are probably having sex (something they do with astonishing frequency and have an unnerving rate of reproduction). They do, in fact, ruin buildings, bite babies, eat crops, and "*very* occasionally eat people alive."

Perhaps Sullivan is right — to know the rat is to know the city.

But there is a new rattenfänger in town — except she neither kills nor catches. Out of the mountains of Arizona has come SenesTech, a company formed by two women with the goal of putting a stop to the unnerving rate of rat reproduction.

"Frankly, rodents are the most successful species. After the next holocaust, rats and Twinkies will be the only things left." — Loretta Mayer, CEO of SenesTech

Their weapon is a compound that dramatically reduces female fertility and, more importantly, renders males sterile. It is put in front of rats in liquids, not solid foods. Rats are notoriously suspicious of food and communicate their suspicions to other rats. This has made poisoning them difficult and the incidence of collateral damage to pets and other wildlife high.

Early results have been promising. So much so, that even New York City has signed on with SenesTech. This is the city where rats are alleged to be bigger, meaner and smarter than any other rats (a dubious claim — but this is, after all, New Yorkers talking); where every modern mayor has appointed a "rat czar" and each czar has lost their war with rats; where it is assumed that "no one can get rid of New York rats;" and where — it's claimed — rats jump into baby strollers and have a go at infants. This is the city that used mustard gas at Riker's Island to solve a "rat problem," and has a \$32 million Neighborhood Rat Reduction plan.

The rat may have met its match n biotechnology — then again, maybe not. As William Faulkner put it:

"The rat of course I rate first. He lives in your house without helping you to buy it or build it or keep the taxes paid; he eats what you eat without helping you raise it or buy it or even haul into the house; you cannot get rid of him; were he not a cannibal, he would have long since inherited the earth."

## The Daily Rat

In your daily discourse, you might consider the rat. For example, you could work any of following into a conversation.

Rats! - expression of disappointment, similar to "bummer," though more forceful.

Ratfink — betray one's cohort, probably an allusion to rats deserting a sinking ship. Rat on — to inform or squeal.

Ratpack — a gang of most any kind.

*Rat-face* – someone sly or underhanded.

*Ratty* – shabby, unkempt.

*Filthy rat* -a reference to the belief that rats are innately and exceptionally dirty and befouled animals (see note).

I smell a rat - to be suspicious of a situation or a person; dogs were prized for their ability to smell out and destroy rats.

*Fight like a cornered rat* - ferocity when threatened, especially by someone or something larger (in the case of rats, usually a cat).

Rat race - a way of life of questionable and often competitive activities that seem to surpass simple goals of happiness, like a lab rat on a treadmill.

And don't forget that the lab rat has contributed more to human health and products than any other animal, with the possible of exception of his cousin the mouse. The rat is favored in research and testing laboratories because of its similarities to humans. Black rats were first used in experiments in 1660, and today over 5000 articles about experiments involving rats are published worldwide each year. If you live an average lifespan, approximately 15 billion rats will die for you in America alone, and billions more around the world.

**Note**: This is a somewhat unfair characterization since it is through continued contact with humans, especially their cities and waste, that rats find filthy habitats and become dirty and befouled themselves. In a more natural state, free of human interdependence, rats are quite clean. They groom themselves and other rats regularly.