

## Early Trench Warfare

A trench system may begin simply as a collection of foxholes hastily dug by troops using their entrenching tools. These holes may subsequently be deepened so that a soldier can safely stand up in one of them, and the individual foxholes may be connected by shallow crawl trenches. From this beginning a system of more permanent trenches may be constructed. In making a trench, soil from the excavation is used to create raised parapets running both in front of and behind the trench. Within the trench are firing positions along a raised forward step called a fire step, and duckboards are placed on the often muddy bottom of the trench to provide secure footing.

## World War I

The typical trench system in [World War I](#) consisted of a series of two, three, four, or more trench lines running parallel to each other and being at least 1 mile in depth. Each trench was dug in a type of zigzag so that no enemy, standing at one end, could fire for more than a few yards down its length. Each of the main lines of trenches was connected to each other and to the rear by a series of communications trenches that were dug roughly perpendicular to them. Food, ammunition, fresh troops, mail, and orders were delivered through these trenches. The intricate network of trenches contained command posts, forward supply dumps, first-aid stations, kitchens, and latrines. Most importantly, it had machine-gun emplacements to defend against an assault, and it had dugouts deep enough to shelter large numbers of defending troops during an enemy bombardment.

The first, or front, line of trenches was known as the outpost line and was thinly held by scattered machine gunners distributed behind dense entanglements of [barbed wire](#). The main line of resistance was a parallel series of two, three, or four lines of trenches containing the bulk of the defending troops. The defenders' artillery was posted to the rear of the main line of trenches. Each main line of trenches was fronted by fields of barbed wire intended to slow down and entangle attacking infantry. As World War I progressed, both sides, but particularly the Germans, developed trench systems of progressively greater depth and strength in order to ensure that the enemy could not achieve a breakthrough at any particular point. The Germans evolved an extremely elaborate defense system using pillboxes, i.e., concrete shelters for machine guns. Behind the pillboxes were more lines of barbed wire and more trenches and dugouts reinforced with concrete to withstand artillery bombardment. Behind these defenses were still more lines of trenches that were effectively out of range of the enemy's artillery fire. By 1918 the Germans had constructed some trench systems that had a depth of 14 miles.

Throughout most of World War I, the opposing armies on the Western Front tried to break through the enemy's trench system by mounting infantry assaults preceded by intense artillery bombardments of the defending trenches. These attacks usually failed, partly because the preliminary bombardment alerted the defenders to the imminence of an attack, thus allowing them time to bring up reserves for a counterattack, and because the bombardments themselves turned the "no-man's-land" between the opposing sides into rough, shell-pocked terrain that slowed down the attacking infantry. The crucial elements in attacking a trench system, surprise and overwhelming numbers of infantry, were thus almost impossible to attain. The Allies' increased use of the tank in 1918 marked the beginning of the end of trench warfare, however, since the tank was invulnerable to the machine gun and [rifle](#) fire that were the trenches' ultimate defense.

## Daily Death in the Trenches

Death was a constant companion to those serving in the line, even when no raid or attack was launched or defended against. In busy sectors the constant shellfire directed by the enemy brought random death, whether their victims were lounging in a trench or lying in a [dugout](#) (many men were buried as a consequence of such large shell-bursts). Similarly, novices were cautioned against their natural inclination to peer over the [parapet](#) of the trench into [No Man's Land](#). Many men died on their first day in the trenches as a consequence of a precisely aimed [sniper's](#) bullet. It has been estimated that up to one third of Allied casualties on the Western Front were actually sustained in the trenches. Aside from enemy injuries, disease wrought a heavy toll.

## Rat Infestation

[Rats in their millions](#) infested trenches. There were two main types, the brown and the black rat. Both were despised but the brown rat was especially feared. Gorging themselves on human remains (grotesquely disfiguring them by eating their eyes and liver) they could grow to the size of a cat. Men, exasperated and afraid of these rats (which would even scamper across their faces in the dark), would attempt to rid the trenches of them by various methods: gunfire, with the [bayonet](#), and even by clubbing them to death. It was futile however: a single

rat couple could produce up to 900 offspring in a year, spreading infection and contaminating food. The rat problem remained for the duration of the war (although many veteran soldiers swore that rats sensed impending heavy enemy shellfire and consequently disappeared from view).

### **Frogs, Lice and Worse**

Rats were by no means the only source of infection and nuisance. [Lice](#) were a never-ending problem, breeding in the seams of filthy clothing and causing men to itch unceasingly. Even when clothing was periodically washed and deloused, lice eggs invariably remained hidden in the seams; within a few hours of the clothes being re-worn the body heat generated would cause the eggs to hatch. Lice caused [Trench Fever](#), a particularly painful disease that began suddenly with severe pain followed by high fever. Recovery - away from the trenches - took up to twelve weeks. Lice were not actually identified as the culprit of Trench Fever until 1918.

Frogs by the score were found in shell holes covered in water; they were also found in the base of trenches. Slugs and horned beetles crowded the sides of the trench. Many men chose to shave their heads entirely to avoid another prevalent scourge: nits. [Trench Foot](#) was another medical condition peculiar to trench life. It was a fungal infection of the feet caused by cold, wet and unsanitary trench conditions. It could turn gangrenous and result in amputation. Trench Foot was more of a problem at the start of trench warfare; as conditions improved in 1915 it rapidly faded, although a trickle of cases continued throughout the war.

### **The Trench Cycle**

Typically, a battalion would be expected to serve a spell in the front line. This would be followed by a stint spent in support, and then in reserve lines. A period of rest would follow - generally short in duration - before the whole cycle of trench duty would start afresh.

In reality the cycle was determined by the necessities of the situation. Even while at rest men might find themselves tasked with duties that placed them in the line of fire. Others would spend far longer in the front line than usual, usually in the more 'busy' sectors. As an example - and the numbers varied widely - a man might expect in a year to spend some 70 days in the front line, with another 30 in nearby support trenches. A further 120 might be spent in reserve. Only 70 days might be spent at rest. The amount of leave varied, with perhaps two weeks being granted during the year.

### **Stand To and the Morning Hate**

The daily routine of life in the trenches began with the morning '[stand to](#)'. An hour before dawn everyone was roused from slumber by the company orderly officer and sergeant and ordered to climb up on the [fire step](#) to guard against a dawn raid by the enemy, bayonets fixed.

This policy of stand to was adopted by both sides, and despite the knowledge that each side prepared itself for raids or attacks timed at dawn, many were actually carried out at this time. Accompanying stand to, as the light grew, was the daily ritual often termed the 'morning hate'. Both sides would often relieve the tension of the early hours with [machine gun](#) fire, shelling and small arms fire, directed into the mist to their front: this made doubly sure of safety at dawn.

### **Rum, Rifles and the Breakfast Truce**

With stand to over, in some areas rum might then be issued to the men. They would then attend to the cleaning of their [rifle](#) equipment, which was followed by its inspection by officers. Breakfast would next be served. In essentially every area of the line at some time or other each side would adopt an unofficial truce while breakfast was served and eaten. This truce often extended to the wagons which delivered such sustenance. Truces such as these seldom lasted long; invariably a senior officer would hear of its existence and quickly stamp it out. Nevertheless it persisted throughout the war, and was more prevalent in quieter sectors of the line.

### **Inspection and Chores**

With breakfast over the men would be inspected by either the company or platoon commander. Once this had been completed NCOs would assign daily chores to each man, which included the refilling of [sandbags](#), the repair of the duckboards on the floor of the trench and the draining of trenches.

Particularly following heavy rainfall, trenches could quickly accumulate muddy water, making life ever more miserable for its occupants as the walls of the trench rapidly became misshapen and were prone to collapse. Pumping equipment was available for the draining of trenches; men would also be assigned to the repair of the trench itself. Still others would be assigned to the [preparation of latrines](#).

### **Daily Boredom**

Given that each side's front line was constantly under watch by snipers and look-outs during daylight, movement was logically restricted until night fell. Thus, once men had concluded their assigned tasks they were free to attend to more personal matters, such as the reading and writing of letters home. Meals were also prepared. Sleep was snatched wherever possible - although it was seldom that men were allowed sufficient time to grab more than a few minutes rest before they were detailed to another task.

### **Dusk: Stand To, Supply and Maintenance**

With the onset of dusk the morning ritual of stand to was repeated, again to guard against a surprise attack launched as light fell. This over, the trenches became a hive of activity. Supply and maintenance activities could be undertaken, although danger invariably accompanied these as the enemy would be alert for such movement. Men would be sent to the rear lines to fetch rations and water ([click here](#) to view film footage of British soldiers receiving rations in 1914). Other men would be assigned sentry duty on the fire step. Generally men would be expected to provide sentry duty for up to two hours. Any longer and there was a real risk of men falling asleep on duty - for which the penalty was death by firing squad.

### **Patrolling No Man's Land**

Patrols would often be sent out into No Man's Land. Some men would be tasked with [repairing or adding barbed wire](#) to the front line. Others however would go out to assigned [listening posts](#), hoping to pick up valuable information from the enemy lines.

Sometimes enemy patrols would meet in No Man's Land. They were then faced with the option of hurrying on their separate ways or else engaging in hand to hand fighting. They could not afford to use their [handguns](#) while patrolling in No Man's Land, for fear of the machine gun fire it would inevitably attract, deadly to all members of the patrol.

### **...And the Smell**

Finally, no overview of trench life can avoid the aspect that instantly struck visitors to the lines: the appalling reek given off by numerous conflicting sources. Rotting carcasses lay around in their thousands. For example, approximately 200,000 men were killed on the Somme battlefields, many of which lay in shallow graves. Overflowing latrines would similarly give off a most offensive stench. Men who had not been afforded the luxury of a bath in weeks or months would offer the pervading odor of dried sweat. The feet were generally accepted to give off the worst odor. Trenches would also smell of creosol or chloride of lime, used to stave off the constant threat of disease and infection. Add to this the smell of cordite, the lingering odor of [poison gas](#), rotting sandbags, stagnant mud, cigarette smoke and cooking food... yet men grew used to it, while it thoroughly overcame first-time visitors to the front.