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UofT Magazine

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Changed by War
Five stories from the University of Toronto's most testing time
THE FIRST WORLD WAR CHANGED CANADIAN SOCIETY PROFOUNDLY, and transformed the University of Toronto no less. A quiet teaching university became first a military training camp for thousands of young volunteers, then a research powerhouse as buildings, resources and brilliant minds were turned over to the greater war effort. The vignettes that follow commemorate the diverse contributions made a century ago by the U of T community during the war. They offer a window into private moments, acts of kindness, bravery and personal sacrifice. Above all, they illustrate a common commitment to find reasons for hope even in a time of loss.
"NOTHING LACKING BUT THE ROAR OF BATTLE"

Between 1914 and 1918, millions of soldiers inhabited the trenches that lined the battlefields of the Western Front. First-hand accounts of trench life offer stark descriptions of filth, disease, injury and death. Apart from being cold, wet and hungry for days, even months on end, soldiers faced near constant bombardment. "Thirteen months and more had some of us sat in trenches," recalled UC alumnus Corporal R.A. Utley, "taking what the Germans chose to give us in the shape of shells and sniper's bullets."

While nothing could prepare recruits for the grim realities of trench warfare, the University of Toronto did what it could to equip its student soldiers for what was coming. Beginning in 1914, the military used Hart House (which was under construction throughout the war) as a training ground. Recruits marched in the Great Hall, the Royal Flying Corps set up workshops in the gymnasium, and the Military Hospitals Commission Command trained medical personnel, including women nurses and rehabilitation specialists, in what are now the Debates and Music Rooms. When wounded soldiers began returning home, large portions of the building were devoted to rehabilitation.

Under the command of Lieutenant-Colonel Vincent Massey (who would become Canada's first native-born Governor General), students also trained under combat-like conditions in the unfinished basement that would later become the Hart House theatre. Lieutenant Lawren Harris, a member of the musketry staff (who would go on to fame as a Group of Seven artist), used his paintbrushes to create an imitation Belgian village that spanned one side of the room.

The shell-shattered replica depicts the main thoroughfare of a village after a German attack. The foreground is dominated by broken trees, rubble and sandbags that seem ineffectual against the destruction. Almost defiantly, a cathedral towers above the scene while smaller houses lie in ruins.

A trench accommodating up to 20 men faced the village. Trainees passed messages along the trench and life-like German marionettes appeared in the windows of bomb-damaged buildings. Student snipers popped up from behind sandbags and fired at the moving targets. "It is very real," one observer reported. "Nothing seemed lacking but the noise and roar of battle to transfer me to a sector of the Western Front."

In what must have seemed a quaint memory to those facing the genuine roar of battle, similar scenes were staged across Toronto in the early years of the war. High Park and the CNE were likewise transformed into training sites, complete with trenches and faux German targets. The Globe reported that throngs of Torontonians turned out at the Exhibition grounds to inspect mock trenches that were "modelled on the latest kinds in use in Flanders and France." Soldiers, many of whom were Varsity men, performed battles, bayonetting sacks painted to resemble Kaiser Wilhelm II, Crown Prince Wilhelm and others as a large crowd of onlookers cheered.

Hart House officially opened on Remembrance Day, 1919, exactly a year after the end of the war. On this occasion Vincent Massey remarked, "The bricks and mortar are but the bones, the community must provide the spirit." Throughout the war, the soldiers, students, faculty, staff and volunteers who passed through Hart House personified Massey's call to action by demonstrating a spirit of sacrifice, devotion and deep commitment to service.
Farmerettes from U of T dig a few "trenches" of a different sort

**FARMERETTES HELP AT HOME**

Dressed in loose-fitting bloomers and straw sun hats, U of T's women undergraduates spent their summer breaks planting and hoeing in service of Canada's war effort. In 1917 and 1918 hundreds of U of T "farmerettes" signed up for national service on Ontario farms, replacing the labour of men lost to military service.

The young women performed all but the heaviest agricultural tasks. In the fields, they planted, weeded and pruned the crops. At harvest time, they picked and packed fruits and vegetables for shipping, and then travelled into town to help sell the produce at market. Living conditions ranged from YWCA-sponsored residences tousty military tents.

Food production was critical to Canada's wartime economy. Farmers were expected to do their patriotic duty by maximizing output to feed troops at home and abroad. The government also entreated young men and women to do their part.

Ontarians took great interest in the farmerettes. Most hailed from urban areas and had little-to-no experience with farm work. Newspapers focused on the novelty and offered regular (and frequently patronizing) updates on how the women were coping with the demands of farm life.

*The Toronto Daily Star* tempted readers with headlines such as: "Plucky Farmerettes Put in Hard Work: But it is not a Bed of Roses, as One City Girl Found Out"; "Mary Feeds her Little Lamb, also Pigs and Other Farm Pets"; and even "One Farmerette Sat on Snapping Turtle, She Thought it was a Nice Smooth Stone."

Reports from the farmerettes themselves characterize the experience as both gruelling and gratifying. Many complained of intense heat, long hours, low pay and poor working conditions. The women protested their rates of pay and the length of the season and through collective action managed to negotiate better wages and conditions.

Yet despite these challenges, farmerettes were intensely proud of their contributions to Canada's war effort: "The main motive of the college girl, in spending her holiday in war work, was to serve her country," related Mossie Waddington (BA 1911 Trinity, MA 1913, PhD 1919), who would become Dean of Women at University College and later at Trinity College. Many women also felt a sense of liberation as they stepped into non-traditional roles. Their work on farms and in factories and offices challenged gender norms and practices. "In agriculture," declared Margaret Wrong in the *Varsity Magazine Supplement*, "it has been proved that women can take the place of men without injury to health or to the work in hand."
FORGOTTEN WARRIORS

Thanks to a best-selling book, hit play and Hollywood movie, millions know the tale War Horse, a fictionalized account of the important and dangerous role horses played in the First World War. Millions of animals, including horses, mules, dogs, pigeons and even glow-worms served on both sides of the conflict. These animal soldiers transported troops and supplies, carried the wounded, detected poisonous gas, hunted rats, delivered messages and offered comfort and companionship to homesick soldiers. And the glow-worms? They were piled into glass jars and provided dim light in the trenches for men to read letters, maps and reports.

In the heat of battle and through the long periods of inactivity, soldiers formed intense bonds with their animals. Lieutenant-Colonel John McCrae, known to millions as the author of the war poem "In Flanders Fields," brought his horse Bonfire with him when he shipped overseas to serve as a field surgeon.

McCrae (BA 1894 UC, MD 1910) wrote: "I have a very deep affection for Bonfire, for we have been through so much together, and some of it bad enough. All the hard spots to which one's memory turns the old fellow has shared, though he says so little about it."

This tenderness spilled over into correspondence. Charming letters from Bonfire to McCrae's nieces and nephews back in Canada were signed with his hoof:

"I HAVE A VERY DEEP AFFECTION FOR BONFIRE, FOR WE HAVE BEEN THROUGH SO MUCH TOGETHER, AND SOME OF IT BAD ENOUGH"

From Bonfire to Jack Kilgour
August 6th, 1916

"Did you ever have a sore hock? I have one now... I am glad you got my picture. My master is well, and the girls tell me I am looking well, too. The ones I like best give me biscuits and sugar, and sometimes flowers... Another one sends me bags of carrots. If you don't know how to eat carrots, tops and all, you had better learn, but I suppose you are just a boy, and do not know how good oats are."

—Bonfire (signed with a horseshoe)

McCrae also befriended at least two dogs while overseas. Mike, a one-eyed terrier, and Bonneau, who accompanied him on patient rounds.

The fate of Mike and Bonneau isn't known. Sadly, McCrae died of pneumonia and meningitis in January of 1918. Bonfire, who survived the war, led McCrae's funeral procession, McCrae's boots reversed in his stirrups.
WAGING WAR ON INFECTION

A century before the First World War, the main weapon of the War of 1812 was a muzzle-loading musket that fired up to four shots a minute to a distance of roughly 90 metres. The machine guns used on the battlefields of the First World War could fire hundreds of rounds per minute with a range of several thousand metres. The weapons of modern warfare mangled tissue and fractured bone, creating the perfect conditions for infection and disease. Many soldiers fighting on the “tetanus-laden” battlefields of Belgium and Northern France became infected with tetanus (also called lockjaw), which had a mortality rate of between 40 and 80 per cent.

In 1914, 32 per cent of the British wounded contracted tetanus. Taken by surprise by the high rates of infection, the British and Allied command looked to Canada and the University of Toronto for help. Dr. John Fitzgerald – U of T Medicine graduate, faculty member and public health pioneer – played a critical role in preventing tetanus and other infectious diseases in the Canadian and allied armies.

In May 1914, at Fitzgerald’s urging, the university took over the fledgling antitoxin laboratory that he had established a year earlier in a backyard stable at 145 Barton Avenue, near the intersection of Bloor and Bathurst streets. Fitzgerald opened his lab using $3,000 of his wife’s inheritance. With new equipment, a hired technician and five horses he began producing safe and inexpensive diphtheria antitoxin that would eventually be made available to all Canadians, regardless of class or income.

After war broke out, military demand for antitoxins and vaccines prompted Fitzgerald to move his lab to a farm donated by brewer and philanthropist Albert E. Gooderham. The lab would eventually become the world-famous Connaught Antitoxin Laboratories. U of T President Robert Falconer and U of T’s board of governors approved a plan for the laboratory to produce enough tetanus antitoxin for every Canadian soldier at a much-reduced rate. In a message to Prime Minister Robert Borden, Falconer characterized it as the university’s “patriotic duty that we in Canada should manufacture tetanus antitoxin for our own expeditionary forces.”

The expanded labs produced a host of life-saving medication for the war effort, including tetanus antitoxin, anti-typhoid vaccine, diphtheria antitoxin, anti-meningitis serum and smallpox vaccine.

By the war’s end, vaccines and the practice of giving wounded soldiers tetanus shots had reduced the rate of infection to 0.1 per cent, making the anti-tetanus program one of the most successful health campaigns in wartime medicine.
The noisy rat-a-tat produced by this First World War rattle (on display in the Memorial Room at Soldiers' Tower) warned all those within earshot of an impending poison gas attack. In the trenches the only criteria for alarm devices were that they be loud and distinctive — but as a bonus, rattles didn’t require use of the lungs. Soldiers used wooden rattles, klaxon horns and steel triangles, but also made alarms from whatever materials they had available, such as empty shell cases and church bells.

Poison gas caused more than a million casualties in the First World War. Widespread use of lethal gas began in April of 1915 during the Second Battle of Ypres in western Belgium. This battle, known as the Canadian Army’s “Baptism of Fire,” gave Canada’s soldiers a reputation as a force to be reckoned with. Yet, in 48 hours of fighting, 6,035 Canadians — one in every three soldiers in the First Division — were injured or killed. More than 2,000 died. The University of Toronto suffered many casualties at Ypres, including medical student Norman Bethune (BSc Med 1916) who was wounded in the fighting and spent three months recovering in a British military hospital.

Prof. Harold Innis was another member of the U of T community who was gassed during his service overseas. Pictured on our cover in 1917 wearing a gas mask around his neck, a “very tired” Innis had just come off duty as a signaller with the Fourth Battery of the Canadian Expeditionary Force in Western Europe.

On April 9, 1917 at Vimy Ridge, gas shells hit between his feet but “did no damage other than to release a rather stifling chlorene (sic) gas.” A few months later Innis was not so lucky when shrapnel from a German shell ripped through his right thigh. The wound was severe but not lethal, thanks in large measure to his avowed “habit of carrying around great quantities of stuff in my rucksack.” Books and other equipment stopped additional shell fractures from entering his body. The pictured Field Message Book, which now belongs to the Harold Innis collection at U of T Archives, was among the objects that may have saved his life.

For two more stories of U of T at war, visit magazine.utoronto.ca.