

## 'The best system of trenches in Australia'

War broke out in 1914 just one year after Canberra was named. The Royal Military College at Duntroon hosted the AIF Officer Training School and the associated Trench Warfare & Bombing School from March 1916.

The Trench Warfare & Bombing School trained officers for the kind of warfare being employed in France and Flanders, so they could train their own companies in turn. Instructional trench systems and schools were developed in Victoria, New South Wales, Western Australia, South Australia, Queensland and Tasmania.

The School at Duntroon was specialised, training only officers and senior non-commissioned officers. The Trench Warfare & Bombing School was intensive, and included many types of bombs and grenades, as well as bomb throwing machines and trench tactics. From mid-1916 to mid-1917, more than 430 participants attended twelve Schools at Duntroon, with Captain (later Major) E L D Brownell as Chief Instructor.

The instructional trench system was multi-layered, incorporating the latest technological developments in 'scientific warfare', with purposeful design in all structures to support and sustain troops below the ground surface. In April 1916, the Governor-General described it as 'the best system of trenches in Australia'.

After the War, the trench system was filled in, obscured by flooding and largely forgotten. In 1990, the site was included in the Jerrabomberra Wetlands Nature Reserve. It was rediscovered during historical research into the reserve area in 2014. Archaeological work in 2015 revealed that the trench system is still visible below the surface.

## Site map



The entry to the loop trail is about 600 metres walk from the reserve car park off Dairy Flat Road. The 350 metre trail is marked but most of its length has no formed pathway. Visitors please take care on uneven or muddy ground and near the river bank.

The Trench Trail has been developed with the assistance of the ACT Heritage Grants Program.

## Further information

Access Canberra: 13 22 81  
[wetlandsandwoodlandstrust.org](http://wetlandsandwoodlandstrust.org)



# Trench Trail

## Jerrabomberra Wetlands Nature Reserve



The Trench Trail provides a fascinating jump back in time to when Australia was training its officers for trench warfare in the First World War. The main layers of the Duntroon instructional trench system (1916-17) are accessible from this walk.

## What lies beneath: a model trench system at Duntroon

A trench system is a layered sequence of trenches and structures, each designed for a specific purpose.

Between the enemy trench (A) and the front line, in 'no man's land', were rows of **barbed wire entanglements (B)**. Beneath these, sappers and miners dug concealed structures, including: a **mine tunnel (C)** to enable detonation of heavy explosives close to, or beneath, the enemy; a sapped **listening post (D)** to enable early warning of an enemy raid or gas attack; a **bombing sap** or tunnel (E) to enable bombs to be thrown into the enemy trench; and a gallery (F) 4m or deeper underground, where sentries would listen for enemy tunnelling.

The first five layers of the system were designed for attack and defence, and were the focus of training:

**G First line fire trench**, 70cm wide and 1.8m deep, featuring island traverses – hexagonal banks of earth left intact with a trench dug on either side, to reduce blast impact of explosives and enhance defence. Concealed forward machine guns covered every 30m of frontage, with guns moved frequently.

**H Inspection trench**, 75cm wide and at least 1.8m deep, for inspection of relieving troops, shelter from bombing, and relocation of casualties from the front line.

**I Bombing trench**, 90cm wide, with recesses for bomb throwing machines and mortars.

**J Second line fire trench**, which could become a 'fall-back' first line trench to repel an enemy raid.

**K Attack trench or jumping off trench**, the staging point for a raid or charge on the enemy; 1.2m wide, 1.8m deep, and partly covered, with footholds and ropes to assist egress from the trench.

From the attack trench back to the rear of the system were four additional layers of trenches:

**L Underground dugouts (a living trench)** where off-duty troops would rest; compartments separated by tunnels about 6m underground, or a zig-zag trench with heavy overhead cover and camouflage

**M Support trench** and covered **Reserve trench (N)**, both about 1.8m wide and 2.1m deep, for troops being brought up to the front.

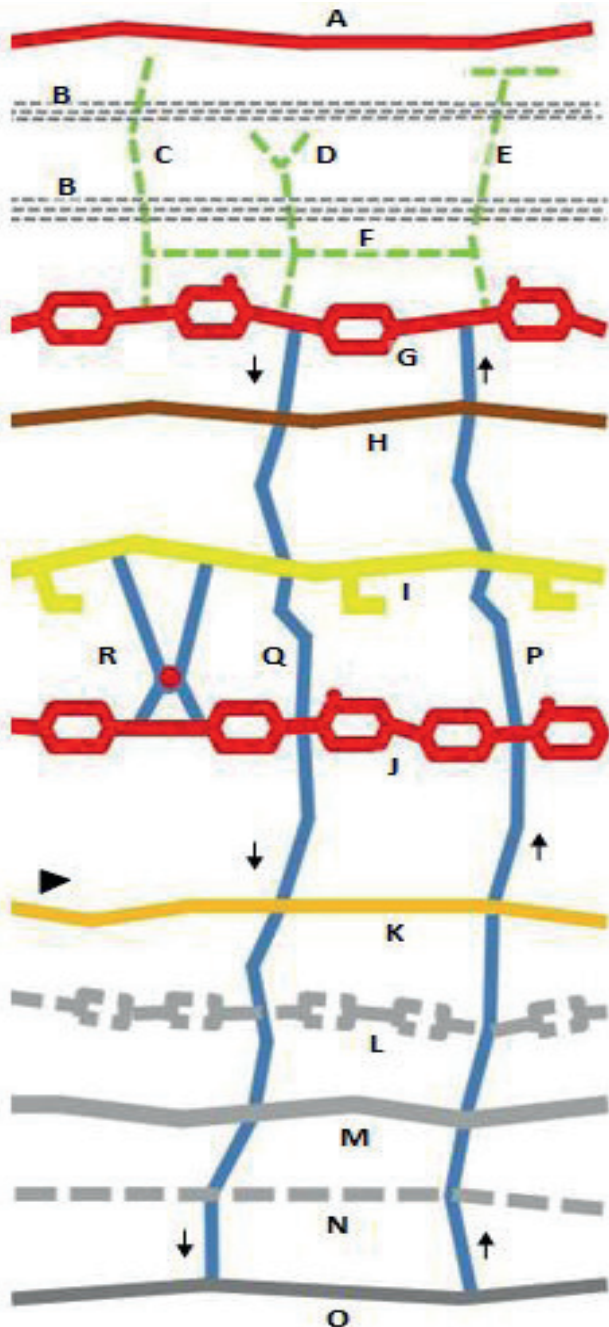
**O Rear lateral communication trench** or 'sunken road' for movement of troops and equipment, wide and deep, and concealed from enemy artillery.

Between the rear of the system and the front line ran parallel **communication trenches**, about 2.1m deep, with one-way traffic.

The 'entrance' trench (P) enabled passage of troops and supplies to the front line, with recesses for ammunition and food, while the 'exit' trench (Q) was slightly wider to enable passage of stretchers, with recesses for first aid.

Design of communication trenches also helped to counter an enemy raid. They included zig-zags to avoid direct lines of sight, straight stretches which could be covered by defending machine gun fire, and recesses for quick deployment of barbed wire 'knife-rest' obstacles and for bombing enemy raiders.

Parallel to the communication trenches was a **trap (R)** to lure enemy raiders down two converging straight trenches covered by machine guns.



Layers L - O are located outside the reserve under the road and turf farm.