

‘Remember Me to All’

**The archaeological recovery and identification
of soldiers who fought and died in the
Battle of Fromelles, 1916**

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The archaeological recovery and identification of soldiers who fought and died in the Battle of Fromelles, 1916

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**This volume contains images of human skeletal remains,
some of which have been altered in order to present potentially
sensitive information in a respectful manner**

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Figure 1.7 (a) Private Stanley Charles Perrett (2015), 7th Battalion, AIF. Australian War Memorial Image P07769.001;
(b) Lance Corporal Cecil Clark Dell (266125) 2nd / 1st Bucks Battalion, Oxford and Bucks Light Infantry.
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Front cover

Foreground – LEFT: Men of the 53rd Battalion of the Australian Imperial Force a few minutes before launching the attack in the Battle of Fromelles (Australian War Memorial image H16396). CENTRE: excavation of the graves in progress (© Oxford Archaeology). RIGHT: Fromelles (Pheasant Wood) Military Cemetery (© Commonwealth War Graves Commission). Background – the sun rising over Pheasant Wood (photo by Paul Backhouse © Oxford Archaeology). Top – 3rd pattern rising sun badge used 1909–49.

Back cover

Selection of artefacts recovered from the graves – rosary, return train ticket, 'Australia' shoulder title, and hand-stitched heart-shaped leather pouch

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Dear Mum,

*Just a line to let you know I am not dead yet. I am going back to the trenches in the morning. I have been at the base for 3 weeks. I have heard no word of Pat. I wrote to the enquiry office in England about him but I haven't got a reply yet. I hope he is alright. There are only two alive in the section I was in, 15 men & that's Pat & I. I have been in the same tent as them ever since we went into camp. There are still nearly 300 of the battalion missing & missing means killed as they can't be brought in. However I don't suppose we will have it as bad again & don't be troubled about me as you may be sure I won't expose myself unless I have to & I am not troubled about Fritz or his shells The weather is getting pretty rotten here now, raining every day & getting cold. It will be lovely shortly. Are you milking many cows this spring or is it nearly all sheep. I haven't had a letter for months & I don't suppose I will see one for several more. **Remember me to all** & don't trouble about me. Hoping everybody is well.*

Your aff son,

Frank

14th October 1916

Extract from a letter from Frank O'Meara to his mother whilst serving on the Western Front. The letter was written three months after fighting in (and surviving) the Battle of Fromelles. Frank's brother, Private Patrick Julian O'Meara, of the 59th Battalion, also fought in the battle but did not survive. His body has not yet been identified.

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Summary

Almost 100 years ago, 250 soldiers were buried behind enemy lines in unmarked mass graves on the outskirts of the village of Fromelles, Northern France. They were among several thousand Australian and British soldiers who were killed in the Battle of Fromelles on the 19th and 20th July 1916, many of whom have no marked grave. This volume describes Oxford Archaeology's contribution to a joint Australian and British government mission to recover the soldiers and re-bury them with full military honours in a new Commonwealth War Graves Cemetery in Fromelles. Bringing together an international team of forensic and investigative professionals, Oxford Archaeology, under the management of the Commonwealth War Graves Commission, excavated and scientifically examined the mortal remains of the soldiers and associated items buried with them. With the full support and cooperation of the soldiers' families, this evidence was, and continues to be, employed alongside DNA and historical sources in an attempt to identify the soldiers by name for their commemoration on headstones. This volume is a technical synthesis of Oxford Archaeology's work on this landmark project involving the largest recovery and identification operation of First World War soldiers ever carried out using modern science. It also includes detail of the identification process undertaken by appropriately experienced government advisors.

The operation commenced in May 2009. Reverend Ray Jones of St George's Memorial Church in Ypres led a service and Defence Minister Quentin Davies formally initiated the project. With just six months to complete the work, and under intense media scrutiny, innovative techniques were devised to meet the unique requirements of the project. A special site compound was designed to integrate the different elements – excavation, recovery and analysis – of the project, computer software was developed to help interpret commingled remains, and a forensic 'chain of custody' approach meant that human remains and associated artefacts had to be signed for whenever they were moved. In these respects the project broke new ground and has arguably become the 'gold standard' for projects of this nature in the future.

The graves, eight in total, were excavated over a period of four months. The responsibility of recovering, analysing and interpreting them was keenly felt among the team, prompting periods of deep reflection on the battle and warfare in general, and fostering a strong determination to do justice to the evidence and ultimately to the individuals themselves.

Precisely how many soldiers would be found was unknown; preliminary investigations suggested 400, while over 1650 soldiers were listed as missing. Soil was meticulously removed, first by a small mechanical digger and then using specialist hand tools, to expose individuals (all practically skeletonised) and artefacts. Teeth and bones were sampled for DNA and all evidence was comprehensively recorded before being lifted and transported to the temporary mortuary. All the graves were highly complex deposits, prone to water infiltration and requiring the exposure of as many individuals as possible before they could be recorded and lifted in a timely and accurate manner, while maintaining the dignity of the deceased at all times. This, in addition to robust water management systems, sampling strategies, and two- and three-dimensional recording by photography, survey and written record, meant that it was possible to recover discrete individuals and make secure associations between the individuals and artefacts. This was of fundamental importance to the identification process and is presented through fully illustrated descriptions in this volume.

Five graves were found to contain between 44 and 52 individuals each, buried in two layers with the majority lying across the width of the graves. One grave contained just three individuals lying one on top of the other, and two graves contained no individuals at all. Other findings, while not directly relevant to identification of the individuals, provided important contextual information on the process of burial in 1916. Chalk lumps and lime, found in all the occupied graves, attest to attempts to sanitise them before they were backfilled, while groundsheets and cable appear to have been used to assist with the interments. In addition, fly pupae suggest that the bodies had been buried, or the graves had been backfilled, between five and ten days after the battle had taken place.

Anthropological and artefactual analyses ran in parallel to the excavation inside a temporary mortuary adjacent to the site. Each individual was examined one at a time at a workstation, which was equipped with overhead cameras used to take photographs of each skeleton from the same fixed point throughout the duration of the project. Images were downloaded onto computers, which also contained, for each individual, associated survey and finds data, the bespoke project database and digital radiographs. This real-time archaeological recording and analysis was invaluable, helping the team manage the constant flow of information and ensuring that the works were completed on time.

Despite the wealth of documents, including letters, diaries and photographs that relate to the Battle of Fromelles, the artefacts and skeletons tell perhaps the most personal stories about what happened on the 19th/20th July 1916. All the skeletons were in good or excellent condition, allowing a high level of biological and personal identification information to be obtained. As expected, the skeletons exhibited extensive wounding from the battlefield (blast, projectile and sharp-force lesions), testimony to the bravery of the men who fought at Fromelles. Horrific in nature, this could be important identification evidence when considered alongside eye-witness accounts held by the British Red Cross, and is enormously helpful to forensic pathologists today, who work to achieve justice for victims of armed conflict.

Many soldiers were in their teens, the youngest approximately 14 years old, but there were also older individuals aged up to at least 50 years. They had an average height of 1.72 metres, which is above the height restrictions in place for enlistment in 1916. The majority were Caucasoid, but at least one was of mixed European and Aboriginal ancestry. Despite considerable breakage of bones, it was possible to make detailed records of the facial attributes of a good number of individuals. Antemortem pathology and trauma were consistent with a group of individuals who had died prematurely in their prime. There was a low rate of joint disease and other conditions that are normally associated with old age. Congenital abnormalities were frequent and the dental work was varied and extensive. Healed fractures, activity related bony changes, dental fillings and chronic disease were also recorded, and these could make an important contribution to identification where they were supported by enlistment documentation.

When the burials took place in 1916, identity discs and personal effects were collected and sent back to the Red Cross and military intelligence. As such, it was expected that a limited range of artefacts would be found. However, approximately 5900 artefacts were recovered and analysed for identification information with the assistance of radiography. Consisting primarily of items the soldiers happened to be carrying with them at their time of death, they included both military and personal effects. The majority were the remains of uniforms, such as insignia, buttons and belt buckles, the last item playing an important part in identifying the army for which individuals served. There were seven items that bore a name and were associated with individuals, although the association was not always strong. Perhaps some of the most poignant artefacts to be found were an unused return train ticket from Freemantle to Perth, which had been tucked inside a gas mask, and a lock of hair, contained within a leather heart.

All the recovered evidence was collated into confidential case reports, one for each soldier, for the identification commission, which convened

annually over five years, beginning in 2010. A data analysis team, which comprised subject matter experts, including a representative from OA, collated this information with historical records and DNA results from living families and the deceased. This was a fundamental part of the identification process and employed a methodology devised specifically for this project – the first attempt at historic identifications on a large scale.

To date, a total of 144 Australian soldiers have been identified by name. Of the remaining 106 soldiers, 75 are considered to have served for the Australian Army, two for the British Army and 29 remain 'known unto God'. Work to identify these soldiers by name will continue under the auspices of each country.

All the soldiers have now been re-buried with full military honours in individual graves at Fromelles (Pheasant Wood) Military Cemetery, the first CWGC cemetery to be built in 50 years. The first and last burials to take place were marked by ceremonies held in January 2010 and on 19th July 2010. At the latter ceremony, held on the 94th anniversary of the Battle of Fromelles, a dedication service was held and the last soldier, presently unidentified, was reburied. The ceremony was attended by HRH the Prince of Wales and the Duchess of Cornwall, the Honourable Dame Quentin Bryce, then Governor-General of the Commonwealth of Australia, HRH the Duke of Kent, President of the CWGC, families of the Missing and the buried soldiers, residents of Fromelles, members of the French, Australian and British governments and armed forces, and members of the various organisations who have worked on the project.

For Oxford Archaeology, which has investigated thousands of archaeological burials, including mass graves, it has been a great privilege to work on the Fromelles project. At all times the soldiers' mortal remains were treated with the utmost dignity and respect, with high regard shown for the sensitivities involved in a project of this nature. The information in this volume has been provided in this spirit and in recognition of the Fromelles Management Board's conditions for information release (as far as a reasonable person would interpret them). An operation such as this clearly has a very important contribution to make to future, similar, projects and multiple disciplines in general. Every attempt has been made to realise this as far as possible here, although some information (for example, images and specialist catalogues) has, by necessity, been omitted or altered.

Ever since the recovery operation began, and given the sensitivities involved, limited information has been revealed up till now about how this project, aiming to recover and identify some of the Missing of Fromelles, was undertaken, what was found and how the information was employed to identify individuals. This volume is the comprehensive account of that work. Ultimately, however, this is a story of the soldiers, their bravery and sacrifice. Individuals remembered.

Résumé

Il y a presque cent ans, durant la Grande Guerre, 250 soldats ont été enterrés dans des fosses communes à l'arrière des lignes ennemies à côté du village de Fromelles, dans le nord de la France. Ils faisaient partie des milliers de soldats australiens et britanniques qui ont péri durant la bataille de Fromelles les 19 et 20 juillet 1916, et dont beaucoup n'ont pas eu de sépulture identifiée. Cet ouvrage décrit le travail réalisé par Oxford Archaeology dans le cadre d'une mission gouvernementale conjointe australienne et britannique visant à rechercher ces soldats et à les réenterrer avec les honneurs militaires dans un nouveau cimetière militaire du Commonwealth à Fromelles. Réunissant une équipe internationale de chercheurs et de spécialistes de la médecine légale, Oxford Archaeology, sous la direction de la Commonwealth War Graves Commission, a exhumé et étudié scientifiquement les dépouilles de ces soldats ainsi que les objets qui les accompagnaient. Avec le soutien et la coopération des familles des disparus, le résultat de ces recherches, avec l'ADN et les archives historiques, a été et continue d'être exploité dans le but d'identifier ces individus et de pouvoir apposer leur nom sur leur sépulture. Cet ouvrage est une synthèse technique des recherches menées par Oxford Archaeology au sein de ce projet majeur constituant la plus importante opération d'exhumation et d'identification de soldats de la Première Guerre mondiale jamais réalisée utilisant les outils de la science moderne. Il inclut également un descriptif des procédés d'identification mis en œuvre par les conseillers gouvernementaux spécialistes.

L'opération a commencé en mai 2009. À cette occasion, le révérent Ray Jones de la Saint Georges Memorial Church d'Ypres a célébré un service, et le ministre de la Défense Quentin Davies a ouvert officiellement le projet. Avec un délai d'à peine six mois pour effectuer ce travail, et dans un contexte de haute surveillance médiatique, des techniques innovantes ont été conçues afin de satisfaire aux exigences particulières de ce projet. Un camp de base a été installé sur le site, intégrant les différentes étapes de l'opération – la fouille, l'exhumation et les analyses ; un programme informatique a été développé afin d'aider à l'interprétation globale des vestiges ; enfin, une « chaîne de traçabilité » médico-légale a été mise en place, entraînant la consignation de chaque déplacement des restes humains et des objets qui leur étaient associés. À ces égards, ce projet innovant servira probablement de référence pour les futures entreprises de ce type.

Les tombes communes, huit au total, ont été fouillées sur une période de quatre mois. La responsabilité impliquée par ces travaux de recherche, d'analyse et d'interprétation a été vivement ressentie au sein de l'équipe, suscitant des périodes de profonde réflexion sur la bataille de Fromelles et la guerre en général, et favorisant une détermination à rendre justice à ces vestiges et finalement aux individus eux-mêmes.

Le nombre exact de soldats susceptibles d'être découverts était inconnu ; des recherches préliminaires suggéraient 400 individus, tandis que plus de 1650 soldats étaient portés disparus. Dans un premier temps, la terre des tombes a été retirée de façon méticuleuse avec une mini-pelle mécanique ; ensuite, les individus (tous pratiquement à l'état de squelette) et les artefacts ont été mis au jour manuellement à l'aide d'outils spécifiques. Les dents et les os ont été échantillonnés pour des analyses ADN. Les vestiges ont été intégralement enregistrés avant leur prélèvement et leur transfert à la morgue temporaire. Toutes les tombes consistaient en des dépôts très complexes, sujets aux infiltrations d'eau et exigeant la mise au jour d'un maximum d'individus avant de pouvoir les enregistrer et les exhumer de façon opportune et précise, tout en maintenant la dignité du défunt à tout moment. Grâce à une gestion des infiltrations d'eau efficace, grâce également aux stratégies d'échantillonnage ainsi qu'aux enregistrements en deux et trois dimensions par la photographie, le relevé dessin et l'écrit, il a été possible de différencier les individus et de réaliser des associations fiables entre ceux-ci et les artefacts. Cette étape a joué un rôle fondamental dans le processus d'identification des soldats et est présentée avec nombre de descriptions illustrées dans cet ouvrage.

Cinq tombes contenaient entre 44 et 52 individus chacune, enterrés sur deux niveaux. La plupart des corps s'étendaient dans la largeur des fosses. Une tombe contenait seulement trois individus inhumés l'un au-dessus de l'autre, et deux fosses ne renfermaient aucun corps. Certaines découvertes, même si elles ne sont pas directement utiles pour l'identification des individus, ont livré d'importantes informations contextuelles sur les procédés d'inhumation en 1916. Des morceaux de craie et de chaux, retrouvés dans toutes les tombes occupées, montrent que l'on a voulu désinfecter celles-ci avant de les remblayer, tandis que des tapis et des câbles semblent avoir été utilisés pour les mises en terre. En outre, la présence de pupes de mouches suggère que les corps ont été enterrés, ou les

tombes remblayées, entre cinq et dix jours après la bataille.

Les analyses anthropologiques et du mobilier ont été menées en parallèle des fouilles au sein d'une morgue temporaire installée sur le site. Chaque corps a fait l'objet d'un examen individuel sur un poste de travail équipé d'appareils photo zénithaux, ceux-ci permettant de prendre des photographies de chaque squelette depuis le même point fixe tout au long de la durée du projet. Les images étaient directement téléchargées sur des ordinateurs, où le dossier de chaque individu comprenait également les relevés et les données de fouilles, la base de données du site et les radiographies numériques. Ces enregistrements et analyses archéologiques en temps réel ont été très précieux et ont permis à l'équipe de gérer le flot d'informations constant et de respecter les délais.

En dépit de la richesse des documents historiques se rapportant à la bataille de Fromelles, incluant des lettres, des journaux intimes et des photographies, les artefacts et les squelettes sont peut-être ceux qui racontent le mieux ce qui s'est passé les 19 et 20 juillet 1916. Tous les squelettes étaient en bon ou excellent état, favorisant l'identification biologique et individuelle du défunt. Comme prévu, les corps montraient d'importantes blessures reçues sur le champ de bataille (lésions dues à des explosions, à des projectiles et à des objets tranchants), témoignages de la bravoure de ces hommes qui ont combattu à Fromelles. Horribles par nature, ces blessures peuvent cependant constituer des outils d'identification d'une grande importance lorsqu'on les met en parallèle avec les récits de témoins oculaires recueillis par la Croix Rouge britannique, de même qu'elles sont extrêmement utiles aux médecins légistes d'aujourd'hui qui travaillent à rendre justice aux victimes de conflits armés.

Beaucoup de ces soldats étaient encore adolescents – le plus jeune d'entre eux était âgé de 14 ans –, mais il y avait également des individus plus âgés atteignant au moins 50 ans. Ces hommes mesuraient en moyenne 1,72 mètre, ce qui est supérieur au minimum requis en 1916 pour l'engagement militaire. La majorité d'entre eux étaient de type caucasien, mais au moins un était d'ascendance mixte européenne et aborigène. Malgré le nombre considérable de fractures, il a été possible d'effectuer des relevés détaillés des attributs faciaux d'un bon nombre d'individus. Les pathologies et traumatismes *ante mortem* étaient cohérents avec ceux d'un groupe d'individus ayant péri prématurément dans la fleur de l'âge. Un faible taux de maladies articulaires et d'autres pathologies normalement associées à la vieillesse a été constaté. Les anomalies congénitales étaient fréquentes, et les travaux dentaires étaient variés et importants. Des fractures ressoudées, des altérations osseuses, des plombages dentaires et des maladies chroniques ont également été enregistrés ; ces éléments ont parfois été déterminants dans

l'identification quand ils ont pu être confrontés à des descriptions réalisées au moment de l'engagement du soldat.

Lors des inhumations en 1916, les plaques d'identité et les effets personnels des soldats ont été récupérés et envoyés à la Croix Rouge et aux services de renseignement militaires. Ainsi, on pensait que peu d'objets allaient être retrouvés. Toutefois, environ 5 900 artefacts ont été découverts et ont pu être analysés par radiographie à des fins d'identification. Il s'agit principalement des objets que les soldats portaient avec eux au moment de leur mort, et ils incluent à la fois des effets personnels et militaires. L'essentiel se composait de restes d'uniformes tels que des insignes, des boutons et des boucles de ceinture, ces dernières jouant un rôle important dans l'identification de l'armée dans laquelle servaient les soldats. Sept objets portaient un nom et étaient associés à des individus, bien que ce lien n'ait pas toujours été établi de façon certaine. Un billet de train retour non utilisé de Freemantle à Perth qui avait été glissé dans un masque à gaz ainsi qu'une mèche de cheveux enfermée dans un cœur en cuir sont peut-être les objets les plus poignants qui ont été découverts.

Tous les indices recueillis ont été archivés dans des dossiers confidentiels, un pour chaque soldat, à l'intention de la commission d'identification, qui se réunit tous les ans depuis 2010 pour une durée de cinq ans. Une équipe d'analyse des données, comprenant des experts en la matière et incluant un représentant d'Oxford Archaeology, a été chargée de collationner ces informations avec les archives historiques et les résultats des analyses ADN effectuées sur les défunts et les membres des familles encore en vie. Étape fondamentale du processus d'identification, ce travail a mis en œuvre une méthodologie conçue spécialement pour ce projet – la première entreprise d'identifications historiques à grande échelle.

À ce jour, 144 soldats australiens ont été identifiés par un nom. Sur les 106 autres soldats, 75 sont considérés comme ayant servi l'armée australienne, 2 l'armée britannique, et 29 demeurent « connus de Dieu seul ». Les travaux pour identifier ces soldats continueront sous les auspices de chaque pays.

Tous les soldats ont été réinhumés avec les honneurs militaires dans des sépultures individuelles au cimetière militaire du Bois du Faisan de Fromelles (Pheasant Wood), le premier cimetière militaire du Commonwealth à être construit en cinquante ans. La première et la dernière inhumation ont été marquées par des commémorations en janvier 2010 et le 19 juillet 2010. Au cours de cette dernière, le jour du 94^e anniversaire de la bataille de Fromelles, une cérémonie de consécration a précédé l'enterrement du dernier soldat, à ce jour non identifié, en présence de Son Altesse Royale le prince de Galles et de la duchesse de Cornouailles, de l'Honorable Dame Quentin Bryce, alors gouverneur général du Commonwealth d'Australie, de Son Altesse Royale le duc de Kent, président du CWGC,

des familles des soldats disparus et enterrés, des habitants de Fromelles, de membres des gouvernements et des forces armées français, australiens et britanniques, et de membres de diverses organisations ayant travaillé sur le projet.

Pour Oxford Archaeology, qui a depuis sa création étudié des milliers de sépultures dont des fosses communes, travailler sur le projet Fromelles a été un très grand privilège. Tout au long de ces recherches, les dépouilles des soldats ont été traitées dans le plus grand respect de leur dignité et avec une grande considération pour les sensibilités impliquées. Les informations contenues dans cet ouvrage ont été délivrées dans cet esprit et selon les conditions établies par le Fromelles Management Board (telles qu'une personne raisonnable les interpréterait). Une telle opération aura certainement un

impact important sur les projets futurs similaires ou plus généralement dans de multiples disciplines. Tous les efforts possibles ont été faits dans ce sens, bien que certaines informations (par exemple, des images et des inventaires de spécialistes) aient été, par nécessité, omises ou modifiées.

Depuis les débuts de l'opération, et compte tenu des sensibilités de chacun, peu d'informations ont été révélées sur la façon dont ce projet, visant à retrouver et à identifier les disparus de Fromelles, a été entrepris, sur ce qui a été découvert et comment les informations récoltées ont été utilisées pour identifier les individus. Cet ouvrage est le compte-rendu complet de ce travail. En définitive, cependant, c'est d'une histoire de ces soldats dont il s'agit, de leur bravoure et de leur sacrifice. En leur mémoire.

Zusammenfassung

Vor fast 100 Jahren wurden am Ortsrand des nordfranzösischen Dorfes Fromelles 250 Soldaten hinter der feindlichen Linie in anonymen Massengräbern begraben. Wie einige Tausend weitere australische und britische Männer hatten sie am 19. und 20. Juli 1916 in der Schlacht von Fromelles ihr Leben verloren. Viele von ihnen haben kein gekennzeichnetes Grab. Der vorliegende Bericht schildert den von Oxford Archaeology zu einer gemeinsamen Initiative der australischen und britischen Regierung geleisteten Beitrag. Ziel dieser Initiative war es gewesen, die Toten zu bergen und in einem neuen Kriegsgräberfriedhof des Commonwealth in Fromelles mit militärischen Ehren zu bestatten. Unter der Leitung der Commonwealth-Kriegsgräber-Kommission (Commonwealth War Graves Commission, CWGC) beauftragte Oxford Archaeology ein internationales Team aus forensischen Experten und Sachverständigen mit der Ausgrabung und wissenschaftlichen Untersuchung der sterblichen Überreste der Soldaten sowie der beiliegenden Objekte. Mit dem Einverständnis und der Unterstützung der heute noch lebenden Angehörigen werden diese Funde neben DNA-Analysen und historischen Quellen bis heute dazu verwendet, die Soldaten namentlich zu identifizieren, um ihrer auf Grabsteinen persönlich gedenken zu können. Das vorliegende Werk ist eine fachliche Zusammenführung der von Oxford Archaeology ausgeführten Arbeiten an diesem bahnbrechenden Projekt: der bis dato größten, mittels moderner wissenschaftlicher Methoden erfolgten Bergung und Identifizierung im Ersten Weltkrieg gefallener Soldaten. Ferner enthält sie Einzelheiten zu dem von erfahrenen Regierungsberatern abgewickelten Identifizierungsverfahren.

Die Ermittlungen begannen im Mai 2009; zu diesem Anlass hielt Hochwürden Ray Jones von der Gedächtniskirche St. Georg in Ypres einen Gottesdienst und das Projekt wurde vom damaligen britischen Verteidigungsminister Quentin Davies offiziell initiiert. Für die Grabungsarbeiten waren lediglich 6 Monate anberaumt und unter dem wachsamen Auge der Medien konzipierte man innovative Vorgehensweisen, um den einmaligen Anforderungen des Vorhabens zu genügen. Zur Integration der einzelnen Forschungskomponenten – Ausgrabung, Exhumierung und Analyse – wurde vor Ort eine Projektzentrale errichtet; um die miteinander vermischten Knochenteile besser interpretieren zu können, entwickelten Experten eine spezielle Computer-Software. Ferner bedeutete der für die Forensik verwendete Ansatz der lückenlosen Rückverfolgbarkeit, dass die menschlichen

Überreste sowie die zugehörigen Funde jedes Mal abgezeichnet werden mussten, wenn sie an einen anderen Ort transferiert wurden. In dieser Hinsicht beschritt das Projekt technisches Neuland, was für Unternehmungen dieser Art künftig wohl der ‚Goldstandard‘ sein wird.

Über einen Zeitraum von vier Monaten wurden insgesamt acht Gräber freigelegt. Welche Verantwortung die Bergung, Auswertung und Interpretation mit sich brachte, war im Team deutlich zu spüren und führte zu Phasen tiefgründiger Reflexionen zum Kampfgeschehen selbst sowie zum Thema Kriegsführung im Allgemeinen. Dies nährte ein starkes Bestreben, den bedeutsamen Fund und letztendlich die Verstorbenen selbst gebührend zu würdigen.

Wie viele tote Soldaten man genau finden würde, war nicht bekannt; Voruntersuchungen gingen von etwa 400 aus, während über 1.650 als vermisst galten. Das Erdreich wurde sorgfältig abgetragen, zunächst mit einem mechanischen Kleinbagger und anschließend unter Einsatz spezieller Handwerkzeuge, um die einzelnen Leichen (praktisch alle skelettiert) sowie die Grabbeilagen freizulegen. An Zähnen und Knochen wurden Proben für DNA-Tests entnommen. Ferner wurden alle Fundstücke ausführlich dokumentiert, bevor sie ausgehoben und in eine vorübergehende Leichenhalle verlegt wurden. Sämtliche Gräber enthielten Ablagerungen stark unterschiedlicher Beschaffenheit und waren durch einsickerndes Wasser gefährdet. Aus diesem Grund mussten möglichst viele Einzelskelette freigelegt werden, bevor sie zeitig und minuziös dokumentiert und geborgen werden konnten, wobei die Würde der Toten stets gewahrt wurde. Diese Vorgehensweise, kombiniert mit soliden Wassermanagementsystemen und Probennahmestrategien, zwei- plus dreidimensionaler Erfassung durch Fotografie, Vermessung und schriftliche Aufzeichnungen, ermöglichte die Bergung individueller Skelette und die eindeutige Zuweisung der gefundenen Objekte. Für den Identifizierungsprozess spielten diese Faktoren eine entscheidende Rolle, wie im vorliegenden Werk durchgehend mit bebilderten Beschreibungen veranschaulicht wird.

Fünf Gräber enthielten jeweils zwischen 44 und 52 verschiedene Skelette, die in zwei Schichten begraben waren, die Mehrheit davon entlang der Breite der Gräber. In einem Grab fand man lediglich drei Personen, die aufeinander lagen; zwei Gräber enthielten keine Gebeine. Andere Fundstücke, wenn auch nicht direkt relevant für die Identifizierung

Einzelner, lieferten wichtige Kontextinformationen zur Art und Weise der im Jahr 1916 erfolgten Bestattung. In allen drei belegten Gräbern fanden sich Kreidebrocken und Kalk – ein Hinweis für den Versuch, die Leichname zu desinfizieren, bevor die ausgehobenen Gruben wieder zugeschüttet wurden. Für die Beisetzung selbst scheinen Bodenplanen und Kabel benutzt worden zu sein; Fliegenpuppen indessen lassen darauf schließen, dass die Verstorbenen fünf bis zehn Tage nach dem Gefecht beigesetzt bzw. die Gräber nach diesem Zeitraum verfüllt wurden.

Parallel zur Ausgrabung erfolgten in einer zeitweiligen Leichenhalle neben der Fundstätte anthropologische Untersuchungen und eine Analyse der Artefakte. An einer Workstation wurden alle Skelette separat untersucht und während des Grabungsverlaufs mit Overhead-Kameras aus demselben Blickwinkel fotografiert. Die Bilder wurden anschließend auf Computer heruntergeladen; dort waren für jedes Skelett auch die Vermessungsdaten sowie Informationen zu den beigefundenen Gegenständen, die speziell konzipierte Projektdatenbank und digitale Röntgenaufnahmen gespeichert. Die archäologische Aufzeichnung und Auswertung in Echtzeit erwies sich als unentbehrlich: Sie half dem Team bei der Bewältigung des kontinuierlichen Informationsflusses und ermöglichte den fristgemäßen Abschluss der Arbeiten.

Ungeachtet der Fülle der zur Schlacht von Fromelles in Bezug stehenden Dokumente, darunter Briefe, Tagebücher und Fotografien, erzählen die Fundstücke und Gebeine wohl die persönlichsten Geschichten darüber, was am 19. und 20. Juli 1916 wirklich geschah. Da sich alle Skelette in einem guten bis ausgezeichneten Zustand befanden, ließen sich umfassende biologische und persönliche Identifizierungsdaten gewinnen. Wie erwartet, zeigten die Knochen zahlreiche Anzeichen für Verwundungen an der Front (durch Explosionen, Geschosse und punktuelle Einwirkung verursachte Läsionen) und bezeugen die Tapferkeit jener Männer, die in Fromelles gekämpft haben. Zusammen mit Augenzeugenberichten aus dem Archiv des Britischen Roten Kreuzes liefern Hinweise dieser Art, so schmerzlich sie auch sein mögen, wichtige Anhaltspunkte für die Identifizierung und helfen den Gerichtsmedizinern sehr bei ihrer Aufgabe, Gerechtigkeit für die Opfer des bewaffneten Konflikts zu erzielen.

Viele der Soldaten waren noch Jugendliche, der jüngste ungefähr 14 Jahre alt. Unter ihnen befanden sich allerdings auch ältere Männer im Alter von mindestens 50 Jahren. Sie waren durchschnittlich 1,72 Meter groß und lagen damit über der für das Jahr 1916 festgelegten Mindestgröße für die Einberufung. Die meisten waren europäischer Herkunft, allerdings stammte mindestens einer von ihnen neben seinen europäischen Vorfahren auch von australischen Ureinwohnern ab. Obwohl viele Knochen zerbrochen waren, konnten detaillierte

Aussagen über die Gesichtsmerkmale einer stattlichen Zahl einzelner Soldaten gemacht werden. Pathologische Merkmale ante mortem und Traumata entsprachen denen frühzeitig in den besten Lebensjahren verstorbener Personen. Der Anteil an Gelenkerkrankungen und anderer, gewöhnlich mit steigendem Alter assoziierter Krankheitsbilder war gering; angeborene Fehlbildungen wurden häufig verzeichnet, und die Zähne zeigten umfangreiche Behandlungen der unterschiedlichsten Art. Verheilte Frakturen, verschleißbedingte Veränderungen im Knochenaufbau, Zahnfüllungen und chronische Erkrankungen wurden ebenfalls nachgewiesen und waren maßgeblich für die Identifizierung in Fällen, in denen Einberufungsbescheide vorlagen.

Da Erkennungsmarken und persönliche Effekten vor der Grablegung im Jahr 1916 eingesammelt und anschließend an das Rote Kreuz sowie an militärische Nachrichtendienstabteilungen gesendet wurden, ging man davon aus, eine begrenzte Anzahl von Artefakten zu finden. Tatsächlich wurden insgesamt rund 5.900 Gegenstände geborgen und mit Hilfe von Röntgenaufnahmen zu Identifizierungszwecken analysiert. Der Fund bestand hauptsächlich aus Objekten, welche die Soldaten zum Todeszeitpunkt bei sich trugen und umfasste sowohl militärische Artikel als auch persönliche Dinge, der Großteil davon Uniformfragmente wie Rangabzeichen, Knöpfe und Gürtelschnallen – letztere spielten für die Bestimmung der Einheit, in der die einzelnen Soldaten dienten, eine wichtige Rolle. Sieben Objekte waren mit einem Namen versehen und konnten mit einzelnen Soldaten in Verbindung gebracht werden, allerdings war die Assoziierung nicht immer eindeutig. Zu den vielleicht ergreifendsten Fundstücken zählen eine unbenutzte Rückfahrkarte von Freemantle nach Perth, die in der Auskleidung einer Gasmaske steckte, und eine Haarlocke im Inneren eines Lederherzchens.

Alle freigelegten Gegenstände wurden in vertraulichen, für jeden Soldaten separat erstellten Fallberichten erfasst und der Identifizierungskommission vorgelegt, die ab 2010 über einen Zeitraum von 5 Jahren einmal jährlich tagte. Ein Datenanalyseteam bestehend aus Fachbereichsexperten, darunter ein Vertreter von Oxford Archaeology, glich diese Informationen mit historischen Aufzeichnungen sowie den Erbgutprofilen lebender Nachkommen und der verstorbenen Soldaten ab. Dies war ein wesentliches Element des Identifikationsprozesses und verwendete eine eigens für dieses Projekt entworfene Methodik – der erstmalige Versuch einer historischen Identifikation in einem so großen Umfang.

Bislang konnten insgesamt 144 australische Soldaten namentlich identifiziert werden. Von den übrigen 106 Soldaten dienten 75 vermutlich im Australischen Heer, zwei für die Landstreitkräfte des Vereinigten Königreiches, und 29 „kennt nur Gott“. Unter Federführung der jeweiligen Länder laufen die Bemühungen weiter, auch diese Männer namentlich zu identifizieren.

Die sterblichen Überreste aller Soldaten wurden auf dem ersten, nach einer 50-jährigen Pause von der CWGC angelegten Soldatenfriedhof in Einzelgräbern in Fromelles (Pheasant Wood) mit militärischen Ehren bestattet. Sowohl die erste als auch die letzte Beisetzung im Januar 2010 und am 19. Juli 2010 wurden durch offizielle Gedenkfeiern begleitet. Bei der letzten Zeremonie, die am 94. Jahrestag der Schlacht von Fromelles stattfand, wurde der Friedhof offiziell eingeweiht und der letzte bis dato nicht näher identifizierte letzte Soldat erneut beerdigt. Unter den Anwesenden waren Charles, Prinz von Wales, mit seiner Gattin, der Herzogin von Cornwall, sowie Dame Quentin Bryce, zum damaligen Zeitpunkt Generalgouverneurin Australiens, der Herzog von Kent (Präsident der CWGC), die Hinterbliebenen der vermissten und bestatteten Soldaten, Einwohner von Fromelles, Repräsentanten der französischen, australischen und britischen Regierungen und Armeen sowie Vertreter verschiedener, an dem Projekt beteiligter Organisationen.

Oxford Archaeology, ein Unternehmen, das Tausende archäologischer Grabstätten, inklusive Massengräber, untersucht hat, betrachtete die Tätigkeit in Fromelles als eine große Ehre. Die sterblichen Überreste der Soldaten wurden pietätvoll und mit größtem Respekt behandelt, und man zollte den besonderen Empfindlichkeiten,

die ein Projekt dieser Art birgt, große Achtung. Auch die im vorliegenden Werk enthaltenen Daten erheben diesen Anspruch und honorieren (bei angemessener, vernünftiger Betrachtung) die vom Verwaltungsrat Fromelles für die Veröffentlichung von Informationen gemachten Auflagen. Ein Unterfangen wie dieses hat künftig zu ähnlichen Projekten, aber auch zu anderen Fachdisziplinen generell einen wichtigen Beitrag zu leisten. An dieser Stelle wurden alle erdenklichen Anstrengungen unternommen, um diesem Streben gerecht zu werden; nichts desto weniger wurden einige Informationen (zum Beispiel Bilder und Fachkataloge) notwendigerweise ausgelassen bzw. geändert.

Um einen würdevollen Umgang mit den Verstorbenen und ihren Angehörigen zu gewährleisten, wurden nach Beginn der Grabung nur begrenzt Informationen darüber preisgegeben, wie dieses Projekt, in dessen Mittelpunkt die Bergung und Identifikation der Vermissten von Fromelles stand, vonstatten ging, was gefunden wurde und wie einzelne Soldaten mit Hilfe dieser Daten identifiziert wurden. Der vorliegende Forschungsbericht trägt den ausgeführten Arbeiten umfassend Rechnung. Schlussendlich jedoch erzählt er die Geschichte der Soldaten, ihrer Tapferkeit und der von ihnen erbrachten Opfer. Wir werden ihrer gedenken.

Foreword

The opening of a new Commonwealth war cemetery at Fromelles on 19 July 2010 was the ceremonial culmination of a number of years of dedicated work to locate, recover, inter and where possible, identify Australian and British soldiers who died and remained unaccounted for from the Battle of Fromelles.

On the basis of compelling evidence collated by a number of devoted historians, the Australian Army began the task of confirming the presence of human remains at a suspected mass burial site adjacent to Pheasant Wood. In 2008 the non-invasive investigation confirmed the presence of human remains at the site. Later that same year, the Australian and British Governments combined to establish the joint project team to recover, inter and, where possible, identify the soldiers from Pheasant Wood.

Team members from the Commonwealth War Graves Commission, the British Ministry of Defence and the Australian Army relied heavily on a range of expert individuals and organisations to perform the diverse functions necessary to fulfil the project aims. Consequently, the joint project team expanded to include anthropologists, micro-biologists, genealogists, historical researchers and archaeologists. The members of the project team, many of whom kindly volunteered their time, were united in the cause to give the soldiers' remains a suitable final resting place.

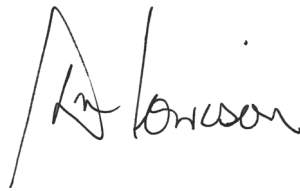
I am very proud of the joint team's achievements. The team discovered and identified the remains of many brave men, who were otherwise destined to remain unidentified. The team also reunited families, rewrote history, and reminded us all that the deeds of our soldiers ought never be forgotten.

One of the very many contributors to the success of the Fromelles Project was the archaeological recovery team from Oxford Archaeology, a dedicated and professional team charged with the emotionally sapping task of recovering the 250 soldiers. The pages of this book will explain how they went about this painstaking task.

With thousands of family members of the lost soldiers registered with the project and a plan to utilise DNA to identify the remains, the recovery team recognised that its task was something more than just an archaeological dig. Indeed, many of the team met with family members of the deceased as tour groups and individuals came to Fromelles to witness history unfolding. The team's strong connection with the project and the families of the deceased is evident each year as many of the members of the recovery team return to Fromelles on the anniversary of the battle to commemorate and to remember.

Ultimately, it was the commitment and professionalism of everyone at Oxford Archaeology that led to the recovery of 250 soldiers and almost 6,000 individual artefacts. The meticulous manner with which Oxford Archaeology recovered these remains and artefacts resulted in the identification of the majority of the soldiers by nationality, and many of those by name. It was a monumental achievement by any measure.

On behalf of all involved in the Fromelles Project, I thank Oxford Archaeology for the significant part that it played in the recovery, identification and honouring of the missing soldiers from the Battle of Fromelles. The Australian Army will be forever grateful.



*Lieutenant General David Morrison, AO
Chief of Army, the Australian Army*



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The senior forensic advisor to the project was Professor Richard Wright, who also undertook statistical analysis on the anthropological data. The fieldwork and post-excavation programmes were overseen by Daniel Poore and directed by Dr Louise Loe. Support and management at the senior level were provided by Robert J Williams.

On-site grave excavation and site logistics were managed by Paul Murray. Survey work was led initially by Anna Komar, followed by Laura Gadsby with Victoria Wilkinson. Excavation and recovery was supervised by Ambika Flavel, Brian Dean and Roland Wessling and undertaken by Andrew Brown, Adrian Burrow, Mark Gibson, Artur Fedorowicz, John Griffiths, Jasmine Hall, Sophie Nias-Cooper, Mattius Philwret, Laura Piper, Juliette Michel and Alistair Zochowski. Chain of custody was managed by Jan Williams, Scene of Crime Officer (SoCO) seconded to the project by Gwent and Glamorgan Police. Special thanks is extended to Dr Michel Signoli for making time in his busy schedule to join the excavation team and for recommending and putting us in contact with finds and conservation experts. We are also grateful to GUARD Archaeology, in particular Dr Iain Banks and Dr Tony Pollard, for making their survey data available during excavation set-up.

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Recovery, analysis and reporting on the anthropology and finds was managed by Caroline Barker and Kate Brady with Ian Scott respectively. Finds assistance was provided by Georgina Slater and Mattius Philwret and finds logistics and support was by Leigh Allen. Anthropological analyses were undertaken by Piotr Drukier, Dr Linda O'Connell and Dr Stephany Leach, with later contributions by Ambika Flavel and Helen Webb. Photography was by Tim Loveless and all graphics work was by Georgina Slater. Photographs of finds were by Kate Brady. The liaison officer for the project was Audrey Charvet and, for a short time, Rachele Wood. Audrey Charvet also provided assistance with staff accommodation, excavation and processing. Considerable logistical and graphics support were provided by Paul Backhouse, particularly during set-up and demobilisation. Information technology support was provided by Paul Miles, Joseph Reeves and Tony Roberts. Liaison with French organisations, in particular for radiography, and officials was assisted by Guillaume De Vedrines. The Fromelles database was designed and built by Lucian Pricop with assistance from Yann Hamon. Methodologies relating to overhead photography and 360° videos of skulls were designed and implemented by Tim Loveless and Caroline Barker.

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'Remember Me to All'



Members of the project team (2009)



Members of the field and temporary mortuary project team (2009)