

An Environmental History of the UK Defence Estate 1945 TO THE PRESENT



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For friends and family – indispensable distractions, the lot of you.

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List of Abbreviations

AFV - Armoured Fighting Vehicle

AHRC - Arts and Humanities Research Council

AONB - Area of Outstanding Natural Beauty

BMC - British Mountaineering Council

CCW - Countryside Council for Wales

CDWC - Committee for the Defence of Welsh Culture

CPRB - Council for the Protection of Rural Britain

CPRE - Council for the Protection of Rural England

CPRW - Council for the Protection of Rural Wales

DNPC - Dartmoor National Park Committee

DOD - Department of Defense (US)

DPA - Dartmoor Preservation Association

DTA - Dartmoor Training Area

DTE - Defence Training Estate

FIBUA - Fighting in a Built-Up Area

FoT - Friends of Tyneham

FWS - Fish and Wildlife Service (US)

GLCM - Ground Launch Missile

ILMP - Integrated Land Management Plan

LIFE – L'Instrument Financier pour l'Environnement

MOD - Ministry of Defence

NA - The National Archive

NFU - National Farmer's Union

NIMBY - Not In My Back Yard

NPAC – National Parks and Access to the Countryside (Act, 1949)

RAF – Royal Air Force

RSPB - Royal Society for the Protection of Birds

SAC – Special Area of Conservation

SAS – Surfers Against Sewage

SENTA - Sennybridge Training Area

SPTA – Salisbury Plain Training Area

SSSI – Site of Special Scientific Interest

TAG – Tyneham Action Group

TAVR - Territorial Army Volunteer Reserve

TVA – Tennessee Valley Authority

WAAF - Women's Auxiliary Air Force

Chapter 1

Introduction

Before a bullet or shell hits a target in a war zone, hundreds have been fired into the turf of a British training area. Before soldiers report for duty in the extreme heat and cold of Afghanistan, they have been tested in the rain, frost, wind and mud of the British countryside. Before negotiating enemy tactics and terrain, they are trained in warfare in some of the most beautiful landscapes in Britain. The trenches of the First World War, the diverse terrestrial and maritime battlefronts of the Second, the raging oil fires of the Gulf War and the impassable mountains of Afghanistan all speak of the inherent role of the environment in war. But the actions that occur in these war zones had their origins in military training areas, which in Britain include familiar places such as the expanses of Salisbury Plain and Dartmoor, holiday spots like Pembrokeshire, Welsh mountains at Sennybridge and the Dorset coastal village of Tyneham, nestled between valley and bay. These five sites, and other training areas in the United Kingdom, may be less well known than the theatres of war themselves, but they are vital in training and preparation for conflict elsewhere. Although the effects of war on the environment, and the environment on war, are carefully observed and extensively studied, preparation for war and the mobilization of militaries on home soils remains under-researched.

This book seeks to rectify this neglect by analysing the emergence, management and meanings of military training areas in southwest England and Wales. It centres around a paradox in the war–environment relationship: how sites of training can become reservoirs of biodiversity, unexpected refuges for plants and wildlife that are consciously managed with conservation in mind. The development and implementation of environmental values – the greening¹ of the Ministry of Defence (MoD) – through legislation, conservation policies, land management and response to opposition, is studied on a site-by-site basis through the aforementioned five varied military training areas. Each has its own particular habitats, diverse histories and areas of controversy, but all are linked by the general shift from

inadvertent 'conservation by serendipity' in the immediate post-war years, to a gradually adopted cohesive and conscious environmental policy.² The publication of the Nugent Report in 1973 is a key date for the military greening, marking it as a subject of military and government policy, and in view of its important role as a catalyst for change it is explored at length and in depth. In addition, the coordination of conservation groups, cooperation with civilian environmental bodies and the public presentation of military environmental credentials via its in-house conservation magazine, *Sanctuary*, are addressed to establish the emergence and meaning of military-environmentalism as a discourse and practice.

The sites in question all have a pre-military history, however, and the arrival of the military in the landscape forced out existing inhabitants. The so-called ghost villages of Imber (Salisbury Plain), Tyneham (Lulworth, Dorset) and Mynydd Epynt (Sennybridge, Wales) are monuments to a loss of community and civilian life replaced by the military. The emptying of the landscapes of human inhabitants is set against the rise of the environmental narrative, and the celebration of non-human inhabitants such as the fairy shrimp of Salisbury Plain. A delicate invertebrate barely visible to the naked eye, it has been championed by environmentalists as an example of a rare species thriving in a military environment, and has become a symbol of military-environmentalism. Also on Salisbury Plain, however, lies Imber, now empty and decayed, and largely inaccessible to the public. I confront the argument that the military deploys an environmental discourse to 'greenwash' more contentious histories of its lands.3 I look at ways in which attempts to memorialize those who came before the military have variously been addressed, implemented and denied, and chart the process by which landscapes are militarized. This work is first and foremost an environmental history that takes as its primary subject and source the landscape and its inhabitants – human and non-human. An instrumental role (which some refer to as agency) is given to natural processes, plants and wildlife.4 But this should not detract from the complex human histories that have occurred on these sites, and I strive to tell such stories, within the context of the events and lands in which they unfold. As Ellen Stroud explains:

Environmental history is not simply another subfield of history, taking its place alongside political, social and economic history. Rather it is a tool for telling better histories in each of these fields, and others. Likewise, the field offers not merely another axis for analyzing relationships of power, but new sites and sources for uncovering those relationships.

Environmental history is sometimes about power, sometimes about place, occasionally about space, and more rarely about all three, but it is always about nature.⁵

War and the environment

Interaction between the military and the environment is as old as war itself. One could suggest, not unreasonably, that an environmental history of warfare extends as far back as the first stone thrown. Recent studies of the military use of land take us back to the ancient civilizations of Greece and Rome, and beyond, and their careful manipulation of the landscape at times of conflict. 6 The ancient protagonists of war understood the power of the landscape and physical elements around them, fortune and victory turning on, at times, a fold of land or the direction of the wind. The technological and temporal leap to modern warfare has altered many aspects of how we wage, suffer and document war, but has not diminished the role the natural environment plays. Military historians have long been attuned to the role of the environment in the theatre of war, but as environmental historians have noticed, while they typically include geographic analysis and graphic descriptions of war's destructive nature, an appreciation of nature's agency - what Lisa Brady refers to as 'nature as material object and intellectual idea taking an active role' - is largely missing from traditional studies of warfare and the military.⁷ The environment is something purely acted upon. Military historians 'preoccupied with combat on specific landscapes almost do environmental history', and readers 'may deduce from conventional texts ecological aspects of warfare', but the military and environmental histories of war 'remain parallel; that is, they do not intersect'.8

In recent years, several historians have taken steps to bring together these two parallel but non-intersecting fields of history. Prominent among them is Edmund Russell, whose *War and Nature: Fighting Humans and Insects with Chemicals from World War I to Silent Spring* (2001) explicitly identifies the distinct concepts of 'war' and 'nature' and questions why we have failed to (fully) see war in nature, or nature in war.⁹ Russell explores the similarities and links in the concurrent wars against human and insect enemies in three areas: ideologically, in terms of borrowing imagery and metaphors from each other; materially, encouraging production and application of knowledge from one sphere to another; and commercially, linking business and profits to the state and military. In doing so, he widens our understanding of 'war' and 'nature' and points to new ways of looking at familiar topics.

William Cronon introduced the idea of a military site as the 'nation's most ironic nature park' in *Uncommon Ground: Toward Reinventing Nature*. ¹⁰ In War and Nature Russell expands upon the idea, offering a broader notion of a military site than that of a place where warfare takes place.¹¹ It marks a transition in thinking of places of war as battlefields to military sites that include places of preparation for war. The bringing together of two normally separate and even antagonistic (if not contradictory) concepts – that of the military with its destructive connotations, and the nature reserve with its protective connotations - is a notion central to my research. In using the phrase, Russell carefully chose his words, noting how we use words like 'irony' and 'paradox' when the world doesn't work the way we think it should. 12 The military with its connections to death and destruction does not align easily with notions of nature reserves and environmental protection. But, as Russell suggests, by looking beyond well-known assumptions of both military and nature, threads of commonality can be found. Nature reserves protect the environment by keeping other damaging (human) presences out. The military, too, is keen to keep others out of its lands, for altogether different reasons (of secrecy and safety). But the end result can be remarkably similar as habitats have time and space to flourish, and environmental bodies and military play a protective, custodial role. Russell heralded a new interest among environmental historians in the environmental histories of conflicts and militaries. As well as issuing a call for new research, Russell suggested that environmental history has thus far failed to address the relationship between military and environment in the places we don't expect to find it, that is, away from the battlefield and in peacetime. I have responded to Russell's call by exploring the environmental history of a national military establishment on home soil, and the particular issues this raises. Before investigating an environmental history in these lesser-frequented intellectual and physical areas, it is important to grasp the extent of environmental history's predilection for war and destruction.

The main and most enduring interest among environmental historians in military activities and their environmental impact has been nuclear testing and fallout, and the toxic legacies of war.¹³ This reflects the longstanding integration between environmental history, and the environmental movement itself. As interest in our environment and the human place within it grew, environmentalists developed a historical perspective to chart the myriad ways in which humans can shape, and damage, the world around them. Books like Carson's *Silent Spring* repositioned academia and activism, galvanizing popular concern about the effects of chemicals and technology

on environmental and human health, and calling for critical assessments of human activities and their impacts in the present, the past and, perhaps most importantly for environmentalists, the future. Environmental history as an academic field itself has a history of involvement in environmental activism, providing background and theory to longstanding problems, documenting developments and highlighting injustice. This legacy contributes to the sustained interest in war and nuclear technology as part of a commitment to critiquing damaging environmental practices. ¹⁴ War, and the military record of presenting environmental damage as a necessary side effect, remains an area in which environmental historians continue to research, to effect change as well as write history.

Although environmental histories of war have emerged from the field of environmental history relatively recently and in small numbers, they cover great spans of time and large expanses of place. They also cover a great range of subjects within the umbrella terms 'environment' and 'nature', from the Nazi war machine (Brüggemeier et al.), to urban sanitation (Lahtinen and Vuorisalo) and the dissemination of anthrax (Szasz).¹⁵ Collectively, however, they have succeeded in reconsidering the role of war in reshaping landscapes and relationships between humans and nonhuman entities in times of conflict. Both Brady and Pearson, for example, present the landscape as an active agent in war. According to Brady, the reduction of Confederate land to 'barren waste' (and the subsequent effect on Southern morale) became a weapon, not a consequence, of war. 16 For Pearson, the reorganization of forests by the Vichy regime and later reclamation by the Resistance movement gave French forests in wartime an ideological as well as productive and combative role.¹⁷ For both, the environment has multiple roles in the history of conflict, as site, resource, victim and weapon.

The effects of war on the environment have captured the attention of academics beyond the field of history. Geographers in particular have studied the consequences of conflict on the physical world, and what this means in matters of national and global security. Mainly concentrating on resource security, and political strategy for managing contested environments, many do not cross over into environmental history, or demonstrate compatible approaches. However, an emerging field of geographers researching environments influenced by different kinds of military use was brought together by *GeoJournal* in a special edition on 'Military Natures: Militarism and the Environment'. Unlike environmental historians, who have largely under-researched non-conflict military areas, the collection of works by *GeoJournal* establishes geographers as the group who have

pioneered academic exploration of ex-military sites, and military training zones. This collection brought together a current and enquiring literature exploring the natures, constructions and meanings of military environments in diverse locations. ²⁰ The contributors, in particular David Havlick and Jeffrey Sasha Davis, offer international perspectives of militarized landscapes, with notions and arguments that provide points of reference, and contrast, for the case studies undertaken here. Their ideas and approaches to militarized landscapes will be discussed here, and throughout the book.

Military-environmentalism or 'khaki conservation'

Introducing the special edition of GeoJournal, Davis states a conviction that a number of historians working on militaries and nature share in common: that military activities do not just destroy nature, they also actively produce it. 21 He adds that 'militarized landscapes extend far beyond combat zones', providing an encouraging precedent for this study, which shares his view. In his discussion of the recent praise former militarized areas have received from environmentalists, tourists, wildlife managers and travel writers as 'pristine' and 'natural', Davis offers a thought-provoking theory of the military presence in the landscape, that seems to me to be of particular relevance for the sites I have researched, that contain traces of former civilian communities. He proposes that 'the labelling of any environment as natural necessarily involves the erasure of the social history of the landscape'.²² In the case of many militarized landscapes, he continues, there is in fact a double erasure. First, there is an erasure of the social life that existed in the place prior to the military takeover, and secondly an erasure of the history of the military's use. 23 At places such as Imber, the village at the heart of Salisbury Plain whose inhabitants were evicted by the military, Tyneham, the requisitioned village in Dorset, and the hill farming community of Mynydd Epynt (now Sennybridge Training Area (SENTA)), such erasure was a literal and abrupt end to community life, followed by a longer process of material decay and limited access.²⁴ The nature of the military requisitions, and the perceived failure of the military to acknowledge sufficiently the pre-military existence of civilian histories and memories, has made these sites controversial, and central to understanding the meanings of military landscapes. Consequently, the histories of the former civilian inhabitants of these landscapes are intricately and unavoidably connected to their environmental histories.

The contrast between the often-neglected human histories of the sites, and the rise of an environmental narrative in the public portrayal of military training areas, invites consideration of Davis's double erasure model of thought, particularly in those chapters dealing with ghost-villages and evictions (Chapters 4, 5 and 6). His conviction that not only are military landscapes worthy of study, but that they require examination of how militaries produce 'natural' environments, alter social practices in the landscape and alter how people interpret the naturalness of the resulting landscape has been inspirational for my research.

Writing alongside Davis in GeoJournal, David Havlick looks at the trend in the United States of America to convert military bases and weapons manufacturing plants to wildlife refuges.²⁵ He takes as his starting point the broad discourse of ecological militarization that frames military practices as compatible with, and contributing to, environmental protection, and working with one case study - Rocky Mountain Arsenal, Colorado, United States of America - identifies logics behind the military-to-wildlife (M2W) conversions. According to Havlick, Biodiversity, Brownfields and Serendipity are all used as concepts to emphasize the win-win outcome of military-to-wildlife conversions, 'as good for local economies, good for the environment, or good for a Department of Defense (DoD) looking to offload lands and good for a Fish and Wildlife Service (FWS) looking to acquire them.'26 Havlick and Davis demonstrate an awareness of military-environmentalism as an active discourse, in operation on military (and continuing at former military) lands. Havlick does not repeat the widespread assumptions that military use degenerates the ecological health of a site. At his case study site, the evidence points convincingly to the opposite: 'a visitor to Rocky Mountain Arsenal today is hard pressed not to encounter mule deer, a variety of waterfowl and raptors, prairie dogs, and vegetation characteristic of the shortgrass prairie that once dominated the western Great Plains of North America.'27

But he examines critically the use of the environmental narrative by the military, demanding that 'before accepting M2W conversions as desirable we should also work to understand as fully as we can how questions of authority, control, contamination and justice are being resolved in these places.'²⁸ He remains hesitant to accept the shift towards environmental protection by the US military due to the potential political and moral ramifications. Sharing the outlook of fellow geographer Rachel Woodward, discussed further below, Havlick argues that:

if we accept the view that military activities are compatible with conservation or that militarized spaces are suitable for recreation and educational purposes consonant with the US National Wildlife Refuge System, we may find that we fail to recognize an array of practises and processes that retain a critical presence in these lands.²⁹

My work takes heed of Havlick's and Woodward's reluctance to accept the environmental benefits of military training and the appropriation of land for other military purposes such as armaments manufacture. However, as found at all five sites, real environmental benefits at UK training areas are visible and recorded by ecologists and scientists, who were often the first to speak in favour (in environmental terms) of a military presence in the landscape. While remaining alert to attempts to overemphasize environmental benefits, in particular for good public relations (see Chapter 6, where coverage of environmental successes at Epynt is translated by MoD into the equivalent advertising pounds), I am equally receptive to the painstaking studies done by conservation groups that record the number of fungi on patches of earth and shrimp in puddles and ditches, and the annual organized bird counts, which together construct a picture of flora and fauna of the military sites from the ground up. To counter Havlick's concerns, I argue that critical and sustained studies of militarized landscapes can only contribute to the public dispersal of information about the environmental health (or otherwise) of said sites, and the more they are researched, the less likely militaries may engage in dodging remedial measures.

Despite obvious differences – the American context, and focus on former military sites contaminated by weapons production, rather than existing training areas – Havlick's work has much to offer a historian of British military-environmentalism. His identification of serendipity as a key logic of military-environmentalism is one repeated by the British MoD, as Chapter 3 explains. The argument that military use of land results, in a happy coincidence, with thriving natural habitats, is found on both sides of the Atlantic. It not only positions the military themselves as benefactors of nature (as opposed to agents of nature's destruction), but, as Havlick states, 'Serendipity [as an explanation] can also prove highly potent: to argue against it is tantamount to going against nature itself.'³⁰

At Havlick's case study site the agency of the change from military to wildlife refuge is largely attributed to natural organisms or processes by DoD, although the human role is noted. Furthermore, nature, he argues, 'is invoked to suggest that environmental remediation at former military bases is a project to return the place to the historical condition it *ought* to have.'³¹ At the British military sites' studies here, I find an alternative narrative adapted to the continuing use of the sites, but with its roots in similar

sentiments. 'Wilderness', the quality that first attracted the military to many of its training areas (see Chapters 2 and 6), had been preserved by the military, at first by serendipity, and in more recent years by military-environmentalism. By keeping out other agents of change (agriculture, industry, urban development and a civilian presence) the military is preserving the enduring landscape quality and safeguarding remaining 'wildernesses'. Keeping people out is one aspect of this 'protective' role. Public access to UK sites is often denied on safety grounds, due to unexploded ordnance and live firing, although increasingly environmental protection is a factor. In Havlick's example, access is severely limited simply because the bases remain toxic and contaminated. Literature from the United States tends to focus on clean-up and the toxic legacies of military bases. Britain does not share to the same extent the number of remediated sites (although undoubtedly it houses its own toxic sites, such as Porton Down, and the tellingly named 'Anthrax Island'). 32 With space on a crowded island at a premium, the military is keen to retain its existing training spaces. The deployment of a military-environmentalist narrative that privileges and promotes the benefits to the landscape of a military presence, in order to reinforce ongoing training capacities, is a feature of military-environmentalism that one geographer in particular has investigated and, in doing so, has opened up British military landscapes as a field of study.

Rachel Woodward has written extensively on military geographies still in use in the United Kingdom, and their political, social, economic and environmental impacts. A geographer working from a background in rural and feminist studies, she is concerned with issues of gender and power in the military, the politics of land use and military-environmentalist discourses.³³ Woodward argues that the army constructs a specific portrayal of the countryside that it uses to maintain control over its territory. She holds that discourses of conservation and landscape are employed by the military to justify (sometimes quite destructive) training practices in areas of high ecological and landscape value, legitimizing their activities and feeding into discourses of militarism and national security that sustain the occupation of vast areas. Woodward's attention focuses on military activity in peacetime and on home territory. Her argument that the military's use of land has changed over time and that it has altered the portrayal of its activities and the land it owns to suit its needs introduces the main theme of this book - the 'greening' of the military - and encourages a critical approach to discursive strategies deployed by the military.

As a cultural geographer, Woodward is concerned with current structures of power and their physical applications (on the landscape) and

implications (for civilians). Providing a sense of historical development is not her primary concern. Like Russell, she calls for more research, and certainly there is a need for a sustained historical perspective on military land use. And, while Woodward is interested in the conflict between military activity and recreational use of national parks, and the tendency for military needs to take priority over environmental concerns, she does not describe or analyse specific environments found under military use, focussing on discussing the range of discourses at work in the military's portrayal of the land. When she addresses military landscapes directly, it involves the ways soldiers are conditioned to read them and how the military represents them as a strategic act.³⁴

Woodward's key concept from my standpoint is that of 'khaki conservation', in other words how the British MoD portrays the environmental impact of its activities on the land.³⁵ In her critical examination of military-environmentalist discourses in operation on British military lands, Woodward argues that 'khaki conservation' portrays environmental defence 'as part and parcel of national defence, and appropriate activity for the Army'. Woodward takes a more overtly oppositional stance against khaki conservation, the presentation 'of military training and environmental protection as conceptually equal' on the grounds that:

it implies that weighing up military activity and conservation is possible on the same set of scales, that the two originate from the same set of objectives. The possibility that environmental protection and preparations for war might reside in fundamentally opposed moral orders is denied, removed from debate.³⁶

I take a more neutral position on khaki conservation, recognizing its environmental benefits as well as its capacity to manipulate and overshadow other stories occurring on military lands. Indeed, a history of the greening of the military is incontrovertibly also a history of khaki conservation, and how it came to be a central feature of military land management and publicity releases. Woodward's conceptualization of 'khaki conservation' as a constructed dialogue, responding to the training needs of the military over time, receives sustained examination here.

Woodward's stance as a civilian and academic outsider to the military areas and discourses she studies is also in contrast to my own research experiences. She attended the public inquiry into military training in Northumberland National Park as an observer, and opens her book *Military Geographies* with a recollection of looking at a military base through the

perimeter fence, in turn watched by a suspicious military. Her research experiences as an outsider inform her criticism of the closed nature of military archives, difficulties of gaining access and the hierarchical and paternalistic structure of the military. While this can be criticized for focusing too intently on negative impacts of a military presence – warning of the need to cultivate a wider perspective – it also encourages others to constantly question and challenge received ideas.

Researching military landscapes

Working on a project that has the military's Defence Estate (DE) as its project partner has given me research experiences that I am aware are unusual. I discuss them briefly here in response to suggestions by colleagues that other researchers of military, and other, landscapes, may find them useful. A running concern through the 'Militarized Landscapes' project, too, has been the gradual immersion of those involved in all things military, and the extent to which our interest in militarized landscapes may have, in turn, militarized us. Careful thought has been given to the impact of the support that the DE has provided the project, and its status as project partner. Reflection on this, and my own positionality as an academic researching active military training areas, seems appropriate to include.

The role of DE as one of two 'project partners' to the Militarized Landscapes project (the other was Icon, an independent film production company based in Bristol) had been secured before I joined the team as the doctoral student. As I researched British training areas, however, contact between myself and the DE team based at Tilshead, Salisbury Plain Training Area (SPTA), became frequent. The DE manages the Military Estate, which is made up of three areas: the Built Estate of barracks, naval bases, depots and aircraft hangars; the Housing Estate, which provides homes for service families; and the Defence Training Estate (DTE). The branch of DE that became my first point of contact was the central office of the Environment and Conservation team for DE. Here, land management, conservation and archaeological work across the regions were coordinated, and records collected. I was given access to the DE archives, housed at Tilshead within the military training area, and so not publicly accessible. Here, site dossiers for all training areas are collected and stored. It is an archive that details - albeit haphazardly, locally and in a multitude of formats - the growth of military-environmentalism, and the effects of its practical application on the ground at training areas across the land. Access to this archive was a crucial resource.

DE also arranged visits to training areas, which I have detailed in an Appendix. As I have described, experiencing militarized landscapes became a central methodology that was achieved by establishing a productive dialogue and working relationship with people within DE and the MoD. It was understood from the outset that the Militarized Landscapes researchers would visit SPTA and the DE offices there. Safety briefings were required, and so in the rather drab prefab offices at Tilshead we began the gradual accustomization to military language, behaviour and surroundings deemed necessary by MoD in order to explore the training area, via an MoD slide show. Dangers duly noted, we were officially upgraded to 'Category 2' civilians, free to roam SPTA unaccompanied when firing was not taking place.

Visits to other training areas, and their conservation group meetings, however, were the result of pursuing contacts with individual camp commandants and DE personnel. Where dialogue could not be established, I was unable to enter the training areas unless on permitted open access days, like any civilian.

Experiencing access privileges heightened my awareness of the extent of access limitations. Exploring the areas beyond the barbed wire acted as a counterpoint to the texts – academic, civilian, protest and historical – that view the militarized landscape from its periphery, and are informed by exclusion and restriction. It allowed me to observe both sides of the fence. As a researcher interested in the histories of the training areas, in which access restriction has played an important role both for the environment and the humans within, and excluded from, it, this was an important perspective to achieve. It is important, too, to note that such a position is admittedly atypical in these kinds of landscapes.

Once granted the ability to move freely on SPTA, all four of the project researchers did so. We consciously decided to visit, as a group, all five of the British training areas under investigation, even though the project had a comparative international scope. Over the course of three years, we almost kept our self-made promise: we visited all bases but Dartmoor Training Area, which we viewed from a distance (with military Chinooks hovering overhead) on walks taken over the course of a writing weekend on the moor, where we co-authored an article reflecting upon our research of militarized landscapes. Our visits to training areas varied in structure, providing a range of experiences. On one trip to SENTA we were accompanied by then-Commandant Lt Col Sernberg, who drove us around the base in his Landrover, and provided us with (military-issue) Landmarc packed lunches as well as immeasurable local knowledge. By contrast, our

visit to Castlemartin was structured around a sit-down meeting with the Commandant and his team of DE employees, after which we were shown the base. We observed troops in training on another visit to SENTA, and on our trip to Tyneham met no military personnel at all. The variety of the visits broadened the research potential of the visits, generating discussions of contrasts and continuities between the bases and their histories.

Our walks generated much conversation on the meaning of militarized landscapes, but the more we explored military training areas, the more we all became aware that this wandering at will in a restricted landscape was contributing to a militarization of our selves. As we negotiated the landscape via military-issue maps, read signs, stepped over countless bullet casings and stopped flinching at the sound of distant shelling, we agreed that by exploring the militarized landscapes we were fast becoming accustomed to places and activities and objects that at first had felt alien.

I remain alert to accusations of 'going native' and experiencing military landscapes from a vantage point too far. I concede that I have become familiar with military landscapes, but argue that for me it was necessary to visit and experience them in order to understand their histories, and write about them. Experiencing militarized landscapes does not require a complete militarization of the self, as a bitterly cold December day observing troops on the Epynt confirmed: I was not, nor ever would be, cut out for military life. However, a familiarity with the traces and symbols of militarization is fundamentally useful for observing its impact on a landscape.

As a researcher interested in maintaining a neutral standpoint with regard to the debate over the military's need to train, concerned instead with the history of military training areas and the role of that debate in their development, I gave this 'militarization' serious and continued thought. As my experience of militarized places grew, and my knowledge of the military and its use of land increased, it seemed to me (as it still does) that the two were vitally connected. I could not truly immerse myself in the history of military training areas without experiencing those places that had been so altered by the military presence. Cooperation with the MoD and DE enabled this, and never with any compromise required on my part as an academic. My work – and any interpretations and errors within it – remains my own, certainly deeply informed by my experiences of militarized landscapes, and absolutely unrestricted as to the conclusions I drew from them.

Companions on all trips to military training areas were the military maps given to me by DE. Drawn to a bigger scale than the Ordnance Survey maps, they depict in detail key land features, topography, scheduled

monuments and ruined buildings where the OS maps have, for secrecy and security's sake, blank spaces etched red and marked 'DANGER AREA'. Fascinating in their own right, and illustrating cartographically the history of the training areas, their requisitioned buildings, access restrictions, impact zones and environmentally and archaeologically sensitive features, I would dearly have liked to have included them in this book. However, it was made clear from the outset that these maps were not to be reproduced in any form. Training areas are places of national security, and their perception as potential 'targets' has increased in a post-9/11 age of anti-terrorist hypersensitivity to potential threat. Unable to use the maps on which I had relied, and which truly depicted what the training areas contained, I decided not to include mapping of the areas that would necessarily have been less detailed, less accurate and less true to the landscapes. It also signifies the constraints that accompany working on actively used military training areas.

In addition to site visits, the DE archives at Tilshead provided a rich depository of the individual site dossiers, which collated all the data collected by conservation groups, military personnel and independent scientists, to form detailed pictures of the sites post-1973. These resources greatly augmented publicly available literature, as did the complete run of *Sanctuary* magazine, stumbled upon in filing cabinets at the DE offices. The individual site dossiers provided a counterpoint to the national scope of the key legislation, such as the Dower and Nugent Reports, which shaped the running of military landholdings, just as local libraries and museums complemented the resources of the National Archives and the British Library.

I am grateful for the help and hospitality of those military personnel who were interested in this project and assisted my research efforts, opening up military archives and thus placing previously unseen documents at my disposal. I also experienced enough dead ends, fruitless requests and unreplied emails to confirm that when it wants to be, the military can still seem a closed institution to a civilian researcher, a good reason, in my view, to encourage future research that pursues the possibilities of opening access to military records and further engages MoD and the DE as research partners.

The parameters of my research were set by the larger requirements of the project to which it belongs: to pursue an environmental history of the rise of environmental awareness within the military, and its consequences for the lands on which they train, and the people and wildlife that live on or near them. Geographical restraints contained the potentially daunting task of offering local foci with which to generate specific questions and

research while maintaining a wider perspective of historical change and national impact. However, no restraints were placed on the expectations of what histories might be found on these military landscapes, as distant and varied as they are. The longstanding military presence on Salisbury Plain has left so many traces of multiple developments, from changes in weaponry to environmental protection, to public protests and public military displays, that it calls for a broadly encompassing historical perspective that embraces William Wordsworth's impressions of the place in the 1790s and the detailed recent observations of the miniscule fairy shrimp by conservationists, that which has happened in between and that which may, if anything does, link the two.

By contrast, a site like Sennybridge – less well known and documented – has been defined in recent history by a single momentous event: the arrival of the military and removal of longstanding non-military inhabitants. This event has informed all that has followed, from the adoption of environmentally aware training practices, to the restriction of access, and lately the encouragement of visitors. Chapter 5, 'SENTA', describes the arrival of the military during the Second World War and the reactions of a politicized opposition movement, and makes links between this difficult legacy and the adoption of pro-environmental practices, which, it argues, serve to redirect critical glances away from the controversial history of the military arrival towards more positive consequences of the military presence. It is hoped that this has not resulted in an uneven history, but rather produced the intended outcome, a history that makes room for the nuances of these landscapes and of the wildlife and the people they contain.

I have followed Woodward's lead in questioning khaki conservation, and considering 'greenwash' as a discourse in operation. My work acknowledges environmental historians who have critiqued damaging practices and presences, and applauds efforts to draw attention to environmentally damaging activities. Above all, I set out to fill the gap in scholarship of military lands in peacetime. It shifts the focus from the theatres of war to home territories, where the training of military forces takes place. In doing so, I have found that well-established assumptions about militaries and the environment, particularly narratives that stress the destructive effects on the natural world, are challenged by the day-to-day presence of the military in landscapes that are prized and recognized as environmentally important. It confirms that the military have been agents of change in the landscapes they occupy, but reveals that they possess the capacity to protect as well as destroy. In keeping out other forces of change in the landscape, such as agro-business and urban sprawl, the military presence plays an inadvertent

and passive role in the protection of the countryside. But, this does not do justice to the proactive environmentalism that is in operation on many military training areas that actively works to secure their environmental health, and which this book argues, has had genuine and long-term benefits for large swathes of national territory. The greening of the MoD has become embedded in military land management, to the extent that computer software integrates conservation needs into training schedules, and troops are deployed on conservation projects and 'species watch' as part of their training.³⁷ As Peter Coates, Principal Investigator on the Militarized Landscapes project, put it, 'military establishments have added defence of nature to defence of nation'.³⁸ By studying the landscapes affected by military greening, I push beyond discussion of overarching discourses to reach new ground concerning the environmental history of the British military, and the environmental affects of a military presence in the landscape.

Although there is a gap in scholarship for an environmental history of military lands in Britain, John Childs has written a history of the DE.³⁹ Taking a historical perspective (as opposed to Woodward's geopolitical focus), Childs' coverage extends back to the Greeks and Romans, providing the most comprehensive account of its kind to date. Though this is a detailed account of what land the military uses, how and where, he asks no real questions of military land use, and the environment is not a primary concern. While a useful source, it is necessary to look elsewhere for works that address the research questions discussed here. Some have looked at the environmental history of other non-militarized areas of the United Kingdom. But while works such as Smout's and Clapp's encourage an environmental perspective on British history, neither mentions the military lands that constitute 1 per cent of British territory.40 More useful are a number of works charting the rise of the conservation and environmental movements, which touch upon the development of some of the debates raised in relation to military lands, such as the establishment and role of national parks, and access rights. 41 Even these, however, only mention military lands briefly, making the imperative for a historical study of military landscapes in Britain clear.

The academic silence surrounding military landscapes is not echoed by the military itself. Indicative of the 'greening' process of the military is the publication of its own nature conservation magazine *Sanctuary* since 1976. Publicizing the conservation work done on military land by the military and partner conservation groups, *Sanctuary* constitutes an important source and will be analysed and discussed at length. Why the MoD devotes considerable money and effort to produce such a glossy wildlife magazine forms one of this project's central research questions. The environmental

outlook as presented by those who write for *Sanctuary* is, naturally, bright. However, it has found support in independent studies of military environments and has raised awareness of the military's environmental role. Doxford's and Hill's assessment of land use for military training in the United Kingdom includes a conservation aspect alongside economic, technological and political considerations.⁴³ While Cohn's report of the US military's conservation efforts, and Woinarski's and Ash's ecological survey of Australian habitats, both military and non-military, do not comment on the British situation, the common conclusions drawn suggest a rising acceptance in some quarters that military activity is no longer contradictory to wildlife protection.⁴⁴

This book does not defend militaries from criticism, but neither does it take a stance against them. It proposes a dispassionate middle ground, where the subject of militarized landscapes and military-environmentalism receives the considered academic attention it deserves. It views military training areas as complex sites where multiple layers of history, land use and memory coexist, and demand inquiry. It argues against those that dismiss military activity as inherently destructive and calls for a more nuanced approach that is responsive to site-specific circumstances. Here, fairy shrimp, feather mosses and fungi offer new perspectives on familiar subjects. All inhabitants of militarized landscapes, they respond to machinery, artillery and troops in ways that often surprise, and in doing so, encourage fresh approaches to the understanding of military places, military practices and the military relationship with the non-military world in which they exist, both natural and human.

The military-civilian divide (and its bridges)

The noise and activity of military training does not endear it to civilian residents. The roar of low-flying aircraft and pounding of exploding shells are rude punctuations to the relative peace of daily life for most, and generate unwanted attention and complaints against the military. The positioning of training areas in sparsely populated places like Dartmoor, Salisbury Plain and Sennybridge was not haphazard. The intentional isolation of military training areas in Britain was intended to minimize both disturbance to civilians, and interest in the training itself. Empty expanses of land provided not only the space required for moving tanks and firing shells, but acted as a physical disincentive for civilian visits and observations (and protests). The very same qualities of emptiness and the absence