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Introduction by Kara Murphy Schlichting, Queens College CUNY

Kristen A. Greer’s *Red Coats and Wild Birds: How Military Ornithologists and Migrant Birds Shaped Empire* examines how British officers on tour in the Mediterranean engaged in formal and informal scientific research in the nineteenth century. It is a study of the ways in which transnational encounters between military men and birds shaped military strategy, ideas about race and masculinity, and conceptions of the British Empire. This roundtable brings together environmental history, histories of science and imperialism, and animal geography for an interdisciplinary consideration of scientific knowledge across spaces and imperial networks in *Red Coats and Wild Birds*.

Robert M. Wilson opens the roundtable. He considers Greer’s investigation of scientific knowledge in the production of empire. Ornithology, he writes, not only occurred in space, but “helped create space or support emerging ideas of spaces.” Wilson also explains how Greer’s historical geography of science can speak to environmental history, and offers environmental historians who might be less familiar with it a brief survey of the social theory that frames *Red Coats and Wild Birds*. Vinita Damodaran continues the roundtable, highlighting Greer’s argument that officers stationed in the Mediterranean shaped not only scientific knowledge in the British empire but ornithology and natural history in Britain as well. She also considers how Greer situates four officer-ornithologists in the production of masculinity, whiteness, and class as part of British military identity.

Maria Lane commends Greer’s ambitious work tracing the “movement of men and birds” to show ornithology’s role in empire. Lane outlines three key contributions that *Red Coats and Wild Birds* makes to historical geography: Greer’s effective use of “life geographies” to explore the production of scientific knowledge and region; the ways in which informal and amateur science contributed to formal imperial knowledge; and Greer’s contextualization of knowledge production within the individual lives and networks of the British empire. Imperialism, Lane reminds us, was central to the development of scientific knowledge. Philip Howell next commends Greer’s uniting of historical geography and environmental history of human-animal relations to peruse new questions about British imperialism. He asks Greer to explain her focus on military knowledge networks as opposed to political ecology or a multi-species perspective. In what ways, Howell asks, might these different focuses reveal additional issues, such as conservation in the face of environmental change? Howell also asks Greer to explain how she chose the life stories of *Red Coasts and Wild Bird’s* four military ornithologists and the book’s tight scope on the Mediterranean. Ruth A. Morgan offers the final reader response of this roundtable. She commends Greer’s analysis of officer-ornithologists field behavior and their interactions with local ‘pothunters’ and local knowledge. Morgan also reflects on the “avian imperial archive” that grounds Greer’s analysis of ornithology and empire. Greer examines the lives, correspondence, and specimen collections of four ornithologist-officers alongside vignettes about four birds these naturalists
studied. The result is a history of intersecting geographies—of men and birds—that shaped both the British Mediterranean empire and environmental knowledge production.

Kirsten Greer takes up a number of the roundtable’s questions and provocations. She responds to Wilson and Morgan’s questions about why she chose the four life geographies of *Red Coats and Wild Birds*. Greer explains how these officer-ornithologists produced much of her book’s source materials. To address Howell’s question about the book’s geographic framework, Greer explains how the Mediterranean careers of these military officers enabled her to employ biography in place in a way that highlights the role of both formal and informal empires and British and local knowledge networks. Additionally, in terms of archives, Greer outlines her interdisciplinary interpretation of what constitutes an archive and the politics of them. Colonialism, Greer writes, shaped the production of environmental knowledge like zoogeography. For Greer, such an acknowledgement is an “act of repair.” Greer explains the importance of linking reparative history to disciplinary histories that have “justified different colonial projects such as slavery and settler colonialism, and enacted deliberate erasures in the historical record.” In so doing, Greer calls for reflection on the biases and injustices embedded in scholarly fields of study.

Before turning to the first set of comments, I would like to pause here and thank all the roundtable participants for taking part. In addition, I would like to remind readers that as an open-access forum, *H-Environment Roundtable Reviews* is available to scholars and non-scholars alike, around the world, free of charge. Please circulate.
Red Coats and Wild Birds is about migrants, human and avian. In the nineteenth century, both British officers and migratory birds passed through sites in the Mediterranean, such as Gibraltar and Malta. Kirsten Greer examines what happened when the lives of these men and birds intersected and the knowledge British officers produced about birds in the process.

The stars of Red Coats and Wild Birds are four adventurous nineteenth century British officer naturalists who were stationed in the Mediterranean during their military service: Thomas Wright Blakiston, Andrew Leith Adams, Leonard Howard Lloyd Irby, and Philip Savile Grey Reid. Employing a method developed by the historical geographers David Lambert and Alan Lester, Greer tells a life geography of each officer ornithologist, showing how each man played a role in maintaining the British empire and generating knowledge about bird life. While the officers were involved in military matters during their deployments, they seem to have spent an inordinate amount of time viewing birds, shooting them, preparing skins, and sending them back to museums in Britain. Greer explains this in terms borrowed from Bruno Latour. British officer naturalists rendered the dead birds into “immutable mobiles” (16) and sent them to “centres of calculation” (17). In Britain, zoologists such as Philip Sclater used this avian data to help refine his understanding of zoogeographic regions. In the process, these officers played a key role in generating scientific knowledge as well as helping scientists visualize bird migratory routes.

But officers were not the only ones passing through the Mediterranean. Migratory birds were, too. Greer highlights a few of these bird species in the book. Preceding every officers’ life history is a vignette about a bird each naturalist studied: the great bustard, hoopoe, Eurasian golden oriole, and osprey. The pairing of birds with an officer reminded me of Hedwig, a snowy owl, with Harry Potter or the dæmons in the His Dark Materials series. Unlike the animals in those novels, the birds described in Greer’s books disappear, by and large, after she introduces them in the beginning of the chapters. They are like the birds in the Mediterranean, briefly making an appearance before moving on.

As a genre of book, Red Coats and Wild Birds is less of an environmental history and more of a historical geography of science, an approach to science studies associated with the geographers David Livingstone, Simon Naylor, and Laura Cameron. These geographers argue that science is created in particular places and the development of scientific knowledge occurs across space. Moreover, a science such as ornithology not only occurs in space. It helped create space or support emerging ideas of spaces,

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such as the zoogeographic regions delineated by Sclater. Greer shows the role British officer naturalists played in producing scientific knowledge while stationed in the Mediterranean and in the museums back in Britain that handled and catalogued the bird skins the officers sent back to their home country.

While Greer’s book will interest environmental historians, they might find some of the writing a bit daunting. As is common in British historical geography in general and historical geographies of science in particular, Red Coats and Wild Birds is informed by social theory. Greer puts this to good effect moving from theory to empirics throughout the book. But sometimes her meaning is opaque for those not familiar with that literature. In the introduction, Greer tells us the book “follows the work on embodiment and performativity to examine the material interactions at the level of the body practice” (6) and that in the nineteenth century human and animal bodies were in flux, “forming convergences and configurations of trajectories, all with their own temporalities” (7). Those unfamiliar with contemporary theory might scratch their heads when reading such passages. Greer would likely say it is long past time for environmental historians to engage with social theory and use its insights to inform their work. But she could have better achieved her goal if she and other historical geographers wrote more accessibly for environmental historians and other non-historical geographers.

As I read the four life histories of the officers, I wondered why these men? Why write about these four and not others? Perhaps there were more sources and richer archival material for these officers than for other nineteenth century British military naturalists. Still, I was curious if other officers would have generated similar accounts about masculinity, region, and bird migration in the Mediterranean.

There is a contradiction at the heart of Red Coats and Wild Birds. Greer bookends her study with an introduction and afterword that discuss the so-called slaughter of migrant birds by locals on Malta, a former British colony featured in the book. According to the EU, such hunting is done in violation of the Birds Directive, a piece of EU conservation legislation. In media accounts, the principled British bird watcher is contrasted with the supposedly “savage” Maltese pothunter. From these vignettes, Greer shows the imperial legacy on Malta and how it is manifested through contemporary conservation disputes. Yet British fascination with birding on Malta, Gibraltar, and other sites in the Mediterranean is partly a result of the pioneering ornithology conducted by British officers in the nineteenth century. Greer clearly admires these intrepid officers and appreciates the ornithological knowledge they produced. But given the current resistance to EU conservation measures and British birdwatching norms, it is hard not to wonder if it would have been better if those military officers never helped kindle British fascination with Mediterranean bird habitats in the first place.

In Red Coats and Wild Birds, Greer does a superb job of showing the role of British officer naturalists in Britain’s imperial project in the Mediterranean and their underappreciated role in ornithology in general and the understanding of bird
migration in particular. With migratory birds under threat worldwide because of habitat loss and climate change, Greer’s book helps us better understand some of the men who developed our knowledge of these birds and their long journeys.
Comments by Vinita Damodaran, University of Sussex

Red Coats and Wild Birds is an eminently readable book on the history of British ornithology through the eyes of military ornithologists who traversed the globe in the nineteenth century as part of the project of imperial careering and in the process documented the flora and fauna of empire in meticulous detail. Here, Greer brings to light the forgotten connection between military ornithologists abroad and how their bird collections helped shape ornithology at home and also fueled a debate on nation, empire, and custodianship in the context of debates around conservation. The unprecedented transformation of the landscapes and environments of the world brought about by the British empire occurred as a physical and biological consequence of economic globalisation and territorial expansion. The resulting ecological reshaping was closely documented and it remains traceable in numerous papers and archives compiled both by private individuals and by colonial bureaucracies, including military men, naturalists, travelers and scientific services. Some of the documents and papers are often studied in isolation, but they are being collected and researched for the network of socio-economic, literary, artistic and ecological information they contain. When studied in association, such material amounts to a modern Domesday-book account of the impact that European globalising forces had on the environment, especially in the tropics.

Greer’s main focus is on the military collecting in the Mediterranean in Malta and Gibraltar where ornithology flourished as part of a discourse of natural history that was peculiarly British and in contrast to other competing empires, including French, Spanish and Ottoman. Focusing on the nineteenth century Mediterranean, the boundary between temperate Europe and tropical Africa, ornithology practices by military officers emerged as a form of empire building where birds became symbolic of culture and identity, connecting landscapes and shaping experiences of place. Through her detailed archival work on mobile birds and their military collectors, Greer captures the circuitry of empire and the production of imperial knowledge of people, places and fauna. Focusing on four imperial officers and their engagement with four bird species, the great bustard, the golden oriole, the hoopoe and osprey, this book is an imaginative and richly textured exercise in both avian and human biography. At another level the book deals with ideas of masculinity, whiteness, class and Britishness as the collectors engage with indigenous societies and different practices. Drawing on a variety of historians, including David Arnold and David Livingstone, Greer locates the centre of calculation in London at the Natural History Museum and emphasises the fact that ornithology was seen as of little economic significance but should be seen as part of region making, surveillance campaigning and military strategy. She makes the case for this quite strongly throughout the book, arguing how British imperial interests transformed “bird skins into geopolitical objects central to imperial imaginings” (22). The military ornithologist Thomas Blakiston emerges in her narrative as a masculine naturalist hero heightening ideas of “masculinity involved in military prowess and codes of
honour" (33). Some of the military natural heroes presented themselves as superior to their French counterparts and men such as Andrew Lay Adams saw natural history fieldwork as preventing the harmful effects of tropicability and helped delineate climatic boundaries for British white racial identities in India. In Gibraltar, she identifies a nascent conservationist discourse where the military ornithologist Irby urged his fellow collectors to kill less and observe more. In her concluding chapter Greer examines how these ideas and practices of ornithology gained elsewhere circulated back to England. Here, she discusses the work of Alfred Newton and avian notions of nation. The book concludes with understanding of territoriability expressed in the bodies of dead birds and as a metaphor of imperial presence, ways of seeing and documenting nature with a view to expand territory and exploit resources.

The global context of this narrative is important. The British intellectual engagement with the environments of empire, primarily India, Africa, the Caribbean and Australia over 200 years, involved the use of the colonies for environmental experimentation. South Asia, Africa and Australia in particular became giant open-air laboratories for scientists attempting to understand, investigate and manipulate a world of new peoples, species, environments and diseases. These encounters and interventions had permanent and sometimes adverse, sometimes beneficial, consequences on colonised people and their environments. Historians such as Richard Grove (Green Imperialism) have argued that the valuable and exhaustive documentation of environmental change, indigenous knowledge systems and practices of natural resource use laid the groundwork for much of modern environmental thinking, especially in the tropics. He has compellingly shown the vital relationship between colonial scientific discourse and early environmentalism in the tropics. The acquisition of a global knowledge of plants and fauna constituted one of the early steps to determine the influence of man on nature. That it coincided with a period when the ecological impact of European maritime and trading expansion first became apparent cannot be disputed. Similarly, the historian Satpal Sangwan notes convincingly that colonial scientists developed a scientific theory of plant distribution within a broader environmental context that matched the intellectual contribution of Buffon, Humboldt and other mainstream ecologists of the pre-Darwinian era. The concerns of these colonial scientists thus cannot be crudely linked to conquest. Grove et.al. have argued for a variety of imperial agents, interests and aims and for the fact that Europeans until the mid-nineteenth century frequently approached Asia, Africa and the Americas in a myriad of different ways, and they described the new world in the minutest detail and often with sympathy.3 It would be useful to know if Greer’s military ornithologist exhibited the same complexity of vision. Can all military ornithology of this period be easily subsumed into the ideology of empire? Here the complexity of the history of science narrative could be developed more by Greer referring to the work of Grove and Nancy Jacobs.4

The latter, in her recent work, has shown how white ornithologists both depended on and operated distinctly from local birders in distilling the interactions between European science and African vernacular knowledge.

For Grove then, the natural history collecting of imperial collectors in a range of fields from Botany to Zoology and Geology developed in the seventeenth and eighteenth century as a product of the ecologically destructive commercial expansion of the East India Company (EIC). It is in this context that the isolated oceanic islands that were watering holes for EIC ships became allegories for the world. The contemporary vision of the demise of the island and the extinction of the dodo on Mauritius was a significant step in the evolution of an environmental discourse that became converted to a nascent conservation ethic following the premonitions of environmental destruction on a global scale. Alfred Newton, the English ornithologist and zoologist emerges in this narrative as an early species preservationist in Europe with a detailed correspondence with Charles Darwin in a context where the dangers of extinction in a biological sense, though less easy to demonstrate, was in no sense less felt, linking Britain firmly to other parts of the globe where extinction was a reality.μ The connections could be brought out far more in the narrative. Notwithstanding these caveats, this is a richly detailed book with exciting insights into the linkages between military conquest, natural history and empire.

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Kirsten Greer’s *Red Coats and Wild Birds* traces the movements of men and birds through nineteenth-century British military networks, showing that ornithology was deeply connected to empire. This ambitious exploration navigates complex terrain to identify links between formal and informal science, empire and ornithology, and birds and men. It centers attention on the British Mediterranean, revealing conceptual links between British officers’ zoogeographical interests and ongoing British presence at strategic sites like the Crimea, Malta, and Gibraltar. There is much for historical geographers to consider in Greer’s book, and I focus in this short response on three contributions of particular interest.

First, Greer’s use of “life geographies” as methodology is notable in effectively tracing both the movements of individuals and the production of regional-geographic ideals. Greer follows four different British officers in four short chapters that review correspondence, scientific society histories, military records, publications, and other archival materials. This approach allows her to dig into their networks, training, interests, and publications, as well as their physical movement to and from military outposts in Britain’s imperial realm. Along the way, readers gain insight not only into the officers’ individual paths but also into the points of intersection and commonality among them, including their connections to key structures and narratives of science and empire. Studying birds was important to military service in multiple locations, and the production of ornithological concepts and theories was deeply influenced by practices and notions of empire. For example, officers made sense of birds’ seasonal migrations through the Mediterranean region by constructing scientific narratives founded in their own experiences of the Mediterranean region as a zone of transimperial connection. Ornithological claims thus reflected British military officers’ own global transience and their enduring commitments to home as a “breeding ground,” helping to justify British presence in geopolitically strategic Mediterranean sites.

The use of life geographies does not allow Greer to analyze the whole of imperial military experience or practice, and she does not make claims that these four officers were statistically representative of their regiments. By following individual life geographies, however, the book reveals that ornithology and other natural science fieldwork by military participants were connected to both formal and informal scientific networks. Soldiers and officers who engaged in the collection, identification, and cataloging of bird specimens were key members of a global community of practice centered on scientific societies and publications in Britain. Through diverse and heterogenous military-scientific service, these officers helped produce a climate-based classification of birds that matched the climate-based classification of societies often used as a justification for empire. The circulation of imperial knowledge in the natural sciences was thus critical to British presence in geopolitically strategic sites and regions.
Greer herself seems not fully satisfied with the life geographies methodology, because she was not able to follow the movements and interactions of bird specimens with the same level of detail as British officers. In my view, the project has much to offer even without life geographies for specimens. The frequent appearance of specimens in the humans’ stories hints at their wider circulation, suggesting good potential for further work using this methodology.

Second, *Red Coats and Wild Birds* offers a useful reminder that the study of informal and amateur science activities can provide great insight into formal knowledge science. This is not really news to historical geographers; many in the discipline have identified their own examples of scientific knowledge that emerge from beyond the confines of formal scientific sites and institutions. But Greer’s work is particularly adept at showing how formal science, military service, and imperial expansion were not simply conversant with one another but were in fact mutually interdependent. By focusing on military officers’ collecting, taxidermy, sketching, photography, and mapping — activities which might otherwise be classified as hobbies or ways to occupy downtime during foreign postings — Greer shows an alignment of formal and informal networks of knowledge production that provided essential support for imperial priorities and military action.

Military men who collected birds, nests, and eggs in the field sent them back to be cataloged, analyzed, and displayed at home in London. Far-flung fieldwork by amateurs was thus central to the production of ornithological theories and methods, providing critical information from multiple zoogeographic zones that were not accessible to naturalists working at home in Britain or in non-military sites. At the same time, Greer shows, fieldwork was important to the British military as a way of keeping soldiers’ and officers’ minds and bodies fit. Working on scientific projects helped them pass idle time productively, without getting into trouble, and with the physical benefits of strenuous exercise through hikes and climbs in search of birds. Military leaders were well aware of the benefits of field activities and even taught natural science skills at the military academies to promote interest. Ornithology work also allowed military personnel to move outside the bounds of military outposts, where they could contribute to surveillance and reconnaissance priorities that helped expand the British imperial domain. In looking at just a few sketches of officers’ life geographies, Greer shows convincingly that ornithology was central to military careers and vice versa. Despite saying very little about the official military duties these officers carried out during their Mediterranean postings, Greer’s book definitively adds ornithology to the list of military activities that produced and maintained empire.

The third major contribution of *Red Coats and Wild Birds* lies in its contextualization of scientific knowledge production. The book shows that ornithology and natural science fieldwork were deeply implicated in the power relations of imperial networks, sites, and personnel. In the crossroads region of the Mediterranean, the science of working with birds reflected the interplay of resistance and oppression in British imperial practice. In these short examples, Greer ably highlights the
complexities of knowledge production and shows that formal imperial knowledge always depended on local places and knowledges, even as it worked to conceal them.

We know that imperialism was critical to the development of both environmental and human sciences. Greer’s focus on ornithology additionally shows that knowledge and influence flowed in both directions between the British scientific and imperial domains. By engaging in vigorous natural science fieldwork, soldier-scientists cultivated heroic personas that stood in contrast to narratives about locals being inferior, immoral, and unable to engage in strenuous scientific fieldwork. Support for military ornithology thus contributed to a broader effort to “imagine control over universal knowledge” (9) through surveillance and documentation of birds. In this context, British collecting and “discovery” of specific birds and specimens was part of the broader process of claiming Mediterranean landscapes as sites of British control and domain. Ornithology then reinforced this claim with specific theories about bird migration, constructing the Mediterranean region as natural connection between European and North African landscapes under British domain and stewardship.

I am personally most interested in how this scientific work and claims-making was dependent on local knowledge. British scientific societies’ explicit calls for military contributions to natural history and specimen collecting at sites like Crimea, Malta, and Gibraltar did not acknowledge the local knowledge about birds that already existed in those same places. Yet all of the workGreer chronicles was in fact dependent on local assistants and interlocutors and produced “multiple and overlapping systems of knowledge” (21). Alongside their daring exploits to collect specimens, officers also purchased taxidermies, eggs and other items directly from local vendors. They relied on local guides for fieldwork and for basic orientation to the flora and fauna of unfamiliar regions. British theories of climate-based zoogeographical regions to explain both nature and society thus paradoxically displaced the local and Indigenous people whose work and presence was crucial to the production of these very scientific theories. Yet British soldiers easily contrasted their own bird collecting (for science) with locals’ bird collecting (for food) in a moral distinction that justified both imperial presence and its replacement of inferior cultures.

There is much here to admire in the way Greer draws these connections and illuminates their contradictions, but this is where I also really wanted more from the book. I wanted more interrogation of the mechanics of knowledge production in each site, more detail about resistance to imperial-scientific narratives, and more contextualization of soldier-scientists within the wider science of ornithology. I know the trend in academic publishing is toward shorter books, but I selfishly wanted this one to be much longer so that it could take on more detailed investigations of each highlighted individual. My own desires notwithstanding, Greer has done well even in a short argument to show how four British officers’ ornithology commitments connected to military-imperial contexts, both producing and reflecting ideas of Britishness, masculinity, temperateness, and superiority. The
book provides many jumping-off points for future scholarship in historical geography, and I expect scholars of science and empire will find it helpfully provocative, as I have.
Comments by Philip Howell, University of Cambridge

In history and historical geography, birds seem to be having something of a moment, and Kirsten Greer’s *Red Coats and Wild Birds* reflects this avian turn. Greer’s previous work on what she has called the “avian imperial archive” has already proposed that birds have played a part in imperialism, geopolitics, and cultural hegemony. This fine new monograph advances these arguments, cementing her place as one of the most innovative new voices in the historical geography of British imperialism, as well as in environmental history and human-animal history. I would definitely put things in this order, as Greer takes her cue principally from Alan Lester and David Lambert’s approach to “imperial careering”, looking at the movement of British imperial and colonial agents in and through the networks that bound the empire together, and using this spatialised biography to open up new questions about the nature of imperialism and colonialism. Greer adopts this method and perspective wholesale, but with the important twist that she sets nonhuman animals’ lives in motion too, their movements seen as inextricably entangled in the thing we call “empire.”

Since there are several commentators in this roundtable review, there is probably no need to describe the book’s contents in great detail. However, in short summary, Greer considers the mobile lives and careers of four British military officers in the mid-nineteenth century, running these alongside the movement of the migratory birds that were the object of their ornithological enthusiasms and expertise. Greer significantly develops the established observation that the largest single cohort of bird collectors and fanciers during the global nineteenth century was to be found nestled within the ranks of the British officer class. Military men were, as she agrees, “ideal observers and collectors in Britain’s formal and informal empire” (12); their imperial careers, their postings and mobility, meant that they had unprecedented opportunities for understanding and studying phenomena such as bird migration. Greer goes rather further than this argument by way of opportunism, however, insisting that these men’s opportunities coincided with and reinforced the British imperial mission. It was not just that they were ideally placed; they were ideologically impelled as well. Greer’s central argument is that ornithology and imperialism were intertwined to such an extent that they could hardly help influencing each other.

There are some important caveats to be noted here. Greer’s focus is very tight: a close-up on her four British officers. And it is regional too: the Mediterranean and its military stations. Greer’s concerns are not with settler colonialism in the First British Empire, principally across the Atlantic, nor with the South Asian and African colonies of exploitation in the Second. Instead, her officers’ lives and their avian interests are played out on and through the “empire route”, the artery of Mediterranean stations that protected Britain’s access to India and the East. Whilst the birds these officers observed traced rather more extensive migrations, and the officers themselves, it is “the politics of migrant birds in the Mediterranean” (5) that
Greer foregrounds. Greer is persuasive in defending this near imperial focus in places where imperial control is largely strategic, no more but no less than that. She argues that this region was “an integral part of Britain’s global empire through imperial defense” (5). Her ornithologist officers live genuinely global lives, but it is the stations of Gibraltar and Malta that anchor this study, and even when she does range further afield, east to the Crimea, and back home to Aldershot, these places are significant because of the need to protect and project British power to the East along this great strategic artery.

As it happens, I know Gibraltar very well, and I have a great deal of sympathy for an imperial angle that includes these near imperial possessions (and we might think of places like Ireland too). But this tight Mediterranean focus does mean that some imperial themes, such as race (most obviously), are rather less insistently present than if Greer were considering, say, South Asia or sub-Saharan Africa. Greer knows this, and she does good work in discussions of indigeneity in North America, and race and racism in North Africa, and the emphasis on racial and cultural superiority is certainly ever present where the British empire is concerned. But absent the great histories of settler colonialism and subcontinental ambition, these nods remain somewhat muted. Greer insists that “avian imaginations were entwined with racist, nationalistic, and gendered ideas about particular places and climates” (200), and she is convincing enough as far as she goes, as far as it is possible to go. But Greer has to read a fair amount into the views and ideas of her military officers, whilst the kinds of racism, nationalism, and imperial masculinity she critiques might be more easily exampled elsewhere in the world – even with the same interest in military ornithology.

It is not really fair to ask for a different book, of course, but if Greer had extended her spatial and temporal range, she might have rustled up the India veterans Colonel William Henry Sykes, Major Robert Rutledge (founder of the Irish Wildbird Conservancy), and Lieutenant Colonel Frederick Nicholson Betts. Lest I be mistaken for an expert, I take these names from the likes of https://www.kolkatabirds.com/articles/birdmenpioneers.html, where there seems to be a plethora of military ornithologists from which to choose. Greer might reasonably be asked why she chose her particular officers, and whether her conclusions would be different with a wider angle and range. Equally, it would be helpful to know more about the connections and correspondence with the civilian ornithologists in, say, the British colonial service at this period, as well as with the ornithologists and bird-fanciers among the colonised communities. Even if we confine ourselves to field ornithology, as Greer does, we might expect other kinds of networked knowledge to be articulated. Greer does suggest connections to, for instance, humane/humanitarian (that is, animal welfare) networks, and to the wider world of popular science and amateur naturalism at home in Britain, but these are really only suggestive rather than substantial. The reader – this reader at least – remains unsure about how ornithological practice develops and circulates in this network or networks, station to station, back and forth from Britain and its possessions, and so on. This is not a book about scientific analysis and the
production of knowledge in and out of centres of calculation, but Greer’s “field” is still almost exclusively a military one. It feels akin to being confined to barracks, rather than strolling in the bazaar or attending to one’s correspondence in the garrison library. We might reasonably ask Greer to fill in the kind of social, scientific, cultural and even political networks in which avian knowledge must have been embedded.

As I have noted above, it is also something of a surprise to see that Greer’s argument pays relatively little service to the human-animal studies literature, and “historical animal geography” in particular. This is not a great complaint, but I would invite Greer to reflect on the positioning of her study, in that the animal geography angle is (to my mind) subordinated to the historical geography of colonialism. I should say that Greer’s work feels comfortably on top of most of the relevant literature here, without needing to overemphasise its conclusions or hypotheses. Indeed, it comes as something of a relief not to have rehearsed the familiar arguments about, say, nonhuman animal agency, though her subtitle makes it clear that she regards the birds who were studies as coadjutants in the making of the imperial world as it developed in the high Victorian era. Even so, whilst Greer carefully considers the opportunities and the challenges of ‘life geographies’, as a consideration of ‘avian life geographies’ this book is perhaps less developed than if it had come from the direction of animal geography and history. Is there more to say about agency in this regard, where living beings are concerned, or even when their hearts have ceased to beat, as presumably their bodies, or parts of them, travelled as specimens in and through the imperial network?

The same could be said about ecological and environmental history, which is again here in slightly limited part, without quite the stress I had initially expected: on political ecology, on the imperial and colonial framings of nature, on empire’s contribution to nascent environmentalism and conservation, and so on. Once more, Greer locates her work adroitly enough, and she brings in relevant material when necessary, but she might want to address these wide-angle, big picture histories at some point. The studies here feel, perfectly pleasingly, specific and located (even when their nature is translocal), but when Greer does invoke the macro-scale this is accomplished in passing, when generalisations would not come amiss. I am thinking here of the decisive transformations covered by environmental historians such as McNeil and Moore, and others. I would ask Greer perhaps to reflect on where her argument sits in relation to the great arguments about the Anthropocene, the capitalocene, the plantationocene, or whatever we want to call it. At what point do the politics of migratory birds become caught up in the arguments about changing environments, individual or collective responsibilities, and the need to protect and conserve bird and other animal life in the face of decisive challenges to their survival? Migration and the movement of living beings are so firmly on our current ecological and geopolitical agenda, it would be good to have Greer chance her arm on contemporary preoccupations occasionally.
This all sounds a bit carping, which it really is, but it is the measure of a good book that it stimulates questions like these rather than demanding assent to its conclusions. I should quickly add that Greer is at her best when it comes to defending the proposition that ornithological expertise “served as an ideological force in imagining control over universal knowledge” (9). This she most convincingly demonstrates by exploring the connections between ornithological knowledge and the crucially important conception of zoogeographic regions. Capturing the proper places for animals (including human animals) and their migratory movements, this environmental chorography served several functions, and here the connections with racial, nationalistic (and gendered, apparently) colonial imaginations are readily apparent. These ideological themes are confirmed as well as challenged by imperial knowledge about place, environment, and movement from one place to another.

This is, then, an excellent contribution to the historical geography of British imperialism, and to animal and environmental history. It succeeds admirably in what it sets out to do, and it prompts further questions about how we might approach the historical geography of empire and colonialism from a multi-species perspective. I very much look forward to Greer’s future work.
Writing in his journal in late 1865, Governor of Madras, William Denison (1804-1871), recounted the escapades of his family’s “tame emu, lately imported from Australia.” Much to the horror of the native gardener, the bird had recently consumed his much-prized cauliflower, which he had been “watching with great anxiety.” Although Denison notes that “it will never do to have all our flowers nibbled at,” the fate of the emu goes unrecorded.6 Earlier during Denison’s term as Governor of New South Wales (1855-61), his brother Alfred had left his collection of birds to the public, which were eventually housed in an aviary in the Sydney Botanic Gardens. Among the surviving birds were pheasants and ducks from China, a partridge from India, and a pigeon from Nicobar Island.7 Favouring conchology and geology over ornithology, Denison nonetheless took opportunities to shoot quail, observe birds, and critique the inadequacies of the bird collections he visited on his vice-regal duties.8

Although Denison pursued his military and vice-regal career mostly in the Australian colonies (1847-61) and then British India (1861-66), he is among the cast of characters who appear (albeit fleetingly) in Greer’s Mediterranean theatre of the British Empire. There, we encounter him in 1866 on his return to England from Madras on a P. and O. steamer, via Alexandria, Malta and Gibraltar – a route that afforded the Royal Engineer the opportunity to inspect the construction of the Suez Canal and fortifications at Malta.9 As Greer’s fascinating study shows, Denison’s voyage through the Mediterranean was becoming a familiar one. The trade route to India and East Asia, as well as imperial interests in North Africa and competition with other empires, encouraged Britain’s efforts to render the region an “English Lake,” mirroring its earlier imperial project in the Indian Ocean.

Following the Mediterranean careers of Denison’s more ornithologically-inclined brother officers, Blakiston, Reid, Adams, and Irby, Greer uncovers what she calls an “avian imperial archive” that was taking shape during the mid to late nineteenth century. Sifting through their correspondence, biographical accounts, and bird specimens, she examines the intersecting cultures and geographies of Victorian ornithology and military practice to trace the contours of Britain’s imperial footprint in and around the Mediterranean. Her Majesty’s peripatetic military ornithologists, Greer demonstrates, helped not only to advance the fields of British ornithology and zoography, but also to assert Britain’s territorial interests abroad.

Ornithology has rarely featured in historical studies of the mutually beneficial enterprises of science and empire, which have tended to consider more overtly

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instrumentalist scientific endeavours, such as meteorology, oceanography, and economic botany. Together with Nancy Jacobs’s work on birding networks in sub-Saharan Africa, however, Greer’s intervention reveals a rich terrain that invites further investigation for historians of nineteenth century science, environment, and empire. By foregrounding the “life geographies and migratory routes of particular bird species” (7), this book underscores the importance of attending to the more-than-human world to make sense of the contingent nature of empire, as well as to the gendered, class-based and racialised processes of environmental knowledge production.

Methodologically, the encounters of birds migrating between Africa and Europe with British officer-ornithologists in the Mediterranean, are especially conducive to the dynamic spatial frameworks of webs, networks, and circuits that have proliferated in the fields of historical geography and environmental history. Observing and collecting passerine birds, either at home in Aldershot or in the Crimea, Gibraltar or Malta, afforded Greer’s officer-ornithologists a means to engage in and contribute to metropolitan science, while undertaking their military service for Britain’s territorial expansion. Military service was an ideal companion for the professionalising discipline of ornithology, by which officers trained in taxidermy and Humboldtian science could enrich a growing corpus of British ornithological knowledge and specimens. To what extent are the curators of such ornithological collections reckoning with these colonial pasts today?

As Denison’s forays suggest, birds mattered to Victorian imperialists, dead or alive. In the British Mediterranean world, avian specimens were despatched to metropolitan collections as trophies of imperial might in the region, while accumulating such specimens was a geopolitical exercise in itself, as French and British naturalists jostled for regional scientific superiority. Here, I wondered about the extent to which French and British ornithology differed, and to what effect. Ornithology also provided opportunities to conduct military surveillance, as Reid found in Morocco and Irby in the Crimea. Under the guise of ornithology, military officers wore a scientific and moral cloak of civilisation that legitimated their collecting practices of shooting and killing birds as well as collecting eggs, and disparaged those of “pothunting” locals. Such articulations of conflicting “colonial cultures of nature” also allowed military ornithologists to designate some birds as national or British, and thus worthy of protection from reckless rural Britons and the ravages of industrialization (103).

Among Greer’s contributions, it is her analyses of the performance of field ornithology that I found especially engaging. The alliance between military service


and ornithology was mutually beneficial. Ornithology profited from the mobility of military officers, while these serving military ornithologists maintained the discipline of their minds and bodies through their natural history fieldwork. The moral and physical ideal of Victorian military officers was one of "temperate martial masculinity," an embodiment of "rational restraint, moral values, and 'useful work' to control 'baser animal passions'" (28). Upholding such an ideal abroad was necessary for Britons to avoid the mental and racial degeneration associated with foreign climes, especially the tropics. Officers could maintain their temperate respectability abroad in garrison libraries, as in Malta and Gibraltar, or on home soil at Aldershot, where they could hone their natural history training in the company of their fellow officers.

The avian landscapes of Britain's garrisons invited military ornithologists to enact bodily their temperate martial masculinity. In their narrative accounts of the field, officer-ornithologists portrayed themselves as "military-scientific heroes" for domestic audiences, while their association with prominent metropolitan collections boosted their reputations. As Greer argues, "The British military-scientific hero demonstrated composure in the theatre of war, asserted authority in the field, and amassed scientific trophies of war for a British audience at home" (116). In the Crimea, for instance, Blakiston presents himself as a "masculine, naturalist hero" (49), collecting specimens from inside Russian lines, while on Gibraltar, Irby's ornithological studies were cast by contemporaries as "the feat of our modern hero" (71). By necessity, accounts of these heroic feats overlooked or diminished the contributions of locals. Acknowledging native assistance would have weakened the Briton's reputation for muscular adventurism, while implying an undesirable equivalence of British and native avian cultures.

Such ornithological heroics, moreover, strengthened British territorial claims to the Mediterranean. Accounts of their heroics familiarised British audiences with the region, while demonstrating that Britons who acted appropriately could thrive in Mediterranean climes. Tropical anxieties loomed large for imperialists, particularly for the likes of Denison, Adams and Irby who had served in India, where they attributed British fallibilities to an apparently hostile climate. As Governor of Madras, for instance, Denison had successfully campaigned to establish a hill station in the Nilgiris, where he and other Anglo elites could escape the heat of the plains.12 Neither temperate nor tropical, the Mediterranean was semitropical – a categorisation that favoured acclimatising Britons en-route to Egypt and Asia, or returning home. As for the resident peoples and birds of this semitropical region, Adams understood the former to be "semicivilized" (61), while Reid noted that they were "utterly unlike ... their more civilised relations in the north" (93).

Understanding avian landscapes in climatic terms derived from the growing influence of zoogeographic thought that sought to determine the distribution of

animal species, and classify them accordingly. This endeavour informed the efforts of the British Ornithological Union (BOU), whose members attempted to delineate the (temperate) boundaries of Britain’s birds to facilitate their protection. Birding abroad followed domestic practices, whereby “the observing and collecting of British birds was one way to enact a sense of belonging” in the English countryside (89). For Reid, stationed at Aldershot, Hampshire, his ornithological performance there helped to sustain his “English gentlemanly identity” and consolidate his “ornithological credentials” (88) as an elected member of the BOU. The avian bodies and landscapes he and his fellow officers encountered in England were the ideal against which they measured the migrant birds of the British Mediterranean.

Whether stationed at home in Aldershot or in the Mediterranean, Greer’s officer-ornithologists found in passerine birds the means to naturalise Britain’s imperial and moral presence, while performing an ideal of military masculinity premised on physical prowess and rational restraint. Animated by human and more-than-human bodies, a British Mediterranean world emerged from the mid-nineteenth century as a result of the close alignment of geopolitical and ornithological interests in the region. The traffic of ornithological specimens and knowledge helped to extend the reach of metropolitan ornithology and to bolster territorial claims, particularly in areas such as North Africa, where Britain’s grip was less certain.

The import of military ornithology in the British Mediterranean suggests that Greer’s approach could be extended across the Empire. Take, for instance, Tasmanian-born Colonel William Vincent Legge (1841-1918), the first president of the Australasian Ornithologists’ Union and a Colonial Member of the BOU. Like Blakiston, Legge was commissioned in the Royal Artillery, and after serving in Colombo, where he contributed to the ornithological collections of the Royal Asiatic Society, he published his History of the Birds of Ceylon (1880). 13 How military ornithology served imperial interests beyond the Mediterranean, and to what effect, warrants further exploration. As Greer so ably demonstrates, avian colonial cultures of nature persist in what was once the British Mediterranean – the avian imperial archive still matters.

Response by Kirsten A. Greer, Nipissing University

First, I would like to thank Kara Schlichting for inviting me to be a part of a H-Environment Roundtable centered on my first book. Thank you to all five of the reviewers for taking the time to engage with my work, especially during a global pandemic. As I write this response, we (in Ontario, Canada) are currently opening up after our third major provincial lockdown, when the pace of work over the last year has slowed down significantly as people have navigated multiple challenges, including health, child and elder care, online teaching, restrictions to research, and even the promotion of my book. I am honoured to be a part of this roundtable, and respect greatly the reviewers’ scholarship, which spans the fields of historical geography, environmental history, new imperial histories, animal geographies, and histories of science.

I consider myself a critical historical geographer interested in human-environment relations in the past, the environmental histories and legacies of the British Empire, and the politics of biodiversity heritage in the global North Atlantic. I am currently in my second term of my Canada Research Chair (CRC) in Global Environmental Histories and Geographies, which addresses specifically reparatory practices “in place” from Northern Ontario to the Caribbean through interdisciplinary, integrative, and engaged (community-based) scholarship in global environmental change research.14 I work in relationship with First Nation communities on Nishinaabeg traditional territory—and the lands protected by the Robinson Huron Treaty of 1850—and collaborate closely with colleagues in the geophysical sciences when examining past climates and environments. The research thus draws on broad, interdisciplinary interpretations of “what constitutes an archive?” while also using archival research to shed light on the colonial underpinnings of the production of environmental knowledges (in this case, zoogeography); doing so is an act of repair.15

My book, which began as a doctoral dissertation, is part of a longer research trajectory that challenges the ways in which colonialism shaped geography as a discipline and, in turn, how geography as a Western positivistic discipline enabled

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different colonial projects such as settler colonialism, resource extraction, and slavery (e.g. parts of my dissertation were published as journal articles). In other words, it addresses directly the decolonization of the “geographical tradition,” which has been embedded in epistemological histories of white privilege and related processes of ‘othering’ into the discipline or, in Stuart Hall’s words, ordering the world into “West and the Rest.” The possibilities of repair, as Catherine Hall writes, are challenging but necessary to explore, and start with confronting histories of racism, including the creation of whiteness as a racial category across different sites of empire. As I argue in my book, nineteenth-century zoogeography—a branch of biogeography concerned with the distribution of animal species across the globe—was deeply embedded with ideas of masculinity, whiteness, and racial differences in the British imperial imagination. In these ways, the book is grounded in the “historical geographies of science” (i.e. Livingstone, Driver, Naylor), as noted by Bob Wilson and Maria Lane, and the histories of colonial environmental thought as introduced by the late Richard Grove, as highlighted by Vinita Dorandoram.

Wilson and Ruth Morgan ask, why these men, and why not others? The British military men featured in my book contributed significantly to the field of zoogeography through their collections, field notes, watercolour sketches, photographs, and publications. Their collecting practices across (and beyond) the British Empire were integral to the establishment of many natural history and ethnographic collections in Britain, and to the development of zoogeographic concepts such as the Sclater-Wallace system, which is still in use today. These men were members of the British Ornithological Union, the Zoological Society, and the Royal Geographical Society, and networked with leading zoologists such as Philip Lutley Sclater, who defined the six zoogeographic regions of the globe. They tracked the seasonal migration of birds, adding to understandings of bird migration, and collected eggs and nests, and helped to define what constituted a “British bird.”


My interest in the links between British military culture, ornithology, and colonialism began in the early 2000s when I conducted research on the histories of colonial ornithology in Ontario, and I worked in the Department of Ornithology at the Royal Ontario Museum. While the original timeframe centered on the twentieth century, my primary source research brought me to the early nineteenth century, and particularly to the British military officers that collected birds while stationed in British North America. Unfamiliar with “New World” environments, they often relied on Indigenous knowledge systems for the acquisition of environmental knowledge (Note: I would write aspects of these pieces differently). See Kirsten Greer and Jeanne Guelke, “‘Intrepid Naturalists and Polite Observers’: Gender and Recreational Birdwatching in Southern Ontario, 1791-1886,” *Journal of Sport History* 30, no. 3 (Fall 2003): 323-346; Kirsten Greer, and Laura Cameron, “‘Swee…’ sensuous landscapes of birdwatching in the eastern provinces, 1900-1939,” *Material History Review* 62, (2005): 35-48; and Greer, “Placing colonial ornithology,” 2008.


especially during a time of species extinctions and bird preservation. More importantly, they all served in the Mediterranean region at some point in their career. By telling the story through four officers inhabiting four different places during their transient careers, the work reveals the heterogeneities involved in British imperial knowledge-making, territoriality, and identity formation.

Phil Howell questions: why frame the work on the Mediterranean and not on other parts of empire? Conceptually, the Mediterranean served as a site of convergence for these transient military men and migrant birds, which helped to capture the circuity of Britain’s global empire. In British imperial geopolitics, the British Mediterranean emerged as a crucial location for the security of empire route to India and South Asia, especially with the opening of the Suez Canal in 1869, and therefore imperial defense in the region was central to maintaining global dominance. The men highlighted in the book not only were stationed in places like Malta and Gibraltar, but in other colonies such as India, British North America, Bermuda, and South Africa. By employing biography in place—using textual, visual, and material culture—and centering the analysis on the “artery of empire” and its defense, I was able to determine how British imperial knowledge and identity emerged “trans-imperially” as officers moved from one site to the next, and mapped the distribution of birds across the globe. Here, zoogeography was co-constituted of British military geopolitics, especially in the Mediterranean where British military officers helped to materialize imaginatively and empirically the region as a semi-tropical site for the physical and cultural acclimatization of British officers en-route to and from India, and to extend the European boundary-line into North Africa as part of Britain’s informal empire.

Furthermore, by focusing on the Mediterranean, I was able to examine closely the role of informal empire, which materialized as an unexpected finding in the research, especially as officers travelled to places like North Africa and Spain during their time off. Here, these men not in uniform engaged covertly with different cultures of nature, languages, and lifeworlds, while documenting landscapes, waterways, and sites of resistance. In these ways, their natural history collecting practices and landscape watercolours served as a form of military surveillance. As Dorandoram and Lane point out, more work could be done to unpack the asymmetrical relationships of local knowledge networks as military ornithologists encountered different local cultures (with different attitudes to hunting, birds, and field science) and different local natures (with different climates, avian populations, and environments). British ornithological knowledge was therefore contingent on local networks, which included Muslims in North Africa, Spanish Catholic farmers, French colonial officials, and Crimean Tatars. The book already entailed piecing together the fragments of the colonial archive in England, Scotland, Ireland, the United States of America, Bermuda, Malta, Gibraltar, Canada, and visiting the archives in these other places, without knowledge of the different languages, was not possible.
Animal geographers Wilson and Howell question the agency of birds in the book, and how humans are privileged over animals. When revising my book from the dissertation, I added short avian vignettes focused on a particular bird species that intersected with military men across the Mediterranean and at home in Britain. These vignettes were placed before each chapter. The main chapters, however, are devoted primarily to the lives of the colonial men that were central to empire-building through imperial defense and zoogeography, which raises questions about their accountability to other forms of colonial violence, knowingly or unknowingly part of, even posthumously. This was a deliberate choice. If reparative history is to recover lost, erased, or compromised histories of racism, as Catherine Hall reflects, then we also need to dig deep into our own disciplinary histories—how they legitimated scientific theories of race, justified different colonial projects such as slavery and settler colonialism, and enacted deliberate erasures in the historical record. These men were central to zoogeographic region-making and the invention of a “British bird,” concepts that continue to reverberate in the politics of bird hunting in Malta, or even British imperial nostalgia, as I address in the beginning and end of my book.

Lastly, Howell suggested that the work could have addressed the Anthropocene and climate change. As I have expressed elsewhere, Karl W. Butzer (1934-2015) once described in his work on the global environmental history of the Mediterranean: “Better, in my experience, a small-scale but intensive collaboration among researchers each of whom master several sets of skills, and who discuss issues on an almost daily basis for weeks at a time. In this way individuals broaden their perspectives, allowing for cross-disciplinary appreciation as well as integration of information and ideas.” Through my work, I noted the annual migration of birds through the specimens, field journals, and publications during a time when the Mediterranean experienced a period of drought in the 1870s. I read descriptions of the disappearing corkwoods in the Spanish countryside, and the military engineering practices to fortify the Rock of Gibraltar, which impacted habitat. Many of these army officers also recorded the daily weather, and described the seasonal winds of the Sirocco and Levant. However, I agree with Butzer, and believe that a comprehensive global ecological history involves collaboration across the humanities and geophysical sciences to bring together histories of past environments and climates.

19 Greer, Hemsworth, Csank, and Calvert.
20 The geographer, Karl Butzer, is best known for his work on Pleistocene environments and geoarchaeology. He spent most of his career in the Department of Geography and the Environment at University of Texas at Austin. What most people do not know is that Butzer’s graduate supervisor was Kenneth Hare from McGill University, who is featured in our project on the historical geographies of McGill Universities field station research. Butzer completed his master’s degree in Meteorology and Geography at McGill in 1955. See Kirsten Greer, Katie Hemsworth, Matthew Farish, Andrew Smith, “Historical Geographies of Interdisciplinarity: McGill University’s Caribbean Project,” Historical Geography 46, (2018): 48-78.
About the Contributors

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