# Locusts on the Arabian oil commodity frontier: space, territory and ecology in the extractive zone

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# Locusts on the Arabian Oil Commodity Frontier: Space, Territory and Ecology in the Extractive Zone

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## ABSTRACT

In 1943, British authorities launched a major operation in Arabia against the desert locust. Considered a threat to food security, teams of troops patrolled the desert to search for the insect and lay poison. Based on British archive documents, I argue that these patrols played a role in the territorialisation of the oil commodity frontier as they provided an opportunity to map and explore southwestern Arabia. British officials believed the patrols conditioned local inhabitants, who were often hostile, to the sight of Westerners and motorised transport. The exertion of modern technology was an act of dominance over "unexplored" space which projected imperial power and reordered social and ecological relations in a way that would assist the frontier movement. By examining this case, I explore the way in which this commodity frontier has a broader set of human and non-human participants.

**خلاصة**

في عام 1943، شنت السلطات البريطانية عملية كبرى في شبه الجزيرة العربية لمكافحة الجراد الصحراوي. ونظراً لاعتباره تهديداً للأمن الغذائي، أجرت فرق عسكرية دوريات في الصحراء للبحث عن أماكن وجود الحشرات ووضع المبيدات للتخلص منها. استناداً إلى وثائق الأرشيف البريطاني، أرى بأن هذه الدوريات قد لعبت دوراً في تقسيم مناطق استخراج النفط الجديدة، حيث أتاحت فرصة لمسح واستكشاف جنوب غرب شبه الجزيرة العربية. اعتقد المسؤولون البريطانيون أن الدوريات قد ساهمت في إعداد السكان المحليين - الذين كانوا في غالب الأحيان منغلقين - لتواجد الأشخاص الغربيين ووسائل النقل الآلية. وكان استعمال أدوات التكنولوجيا الحديثة بمثابة مؤشر على الهيمنة في المناطق "غير المستكشفة بعد" ، ما عكس بوضوح القوة الإمبريالية, وأعاد هيكلة العلاقات الاجتماعية والبيئية هناك بصورة ساعدت في مد النفوذ عليها. من خلال دراستي لهذه الحالة، إنني أهدف للبحث في مجموعة العوامل البشرية وغير البشرية الأوسع التي أسهمت في تشكيل هذه المناطق.

The development of oil fields in the Middle East had a transformative effect on global energy markets and the world economy. A corpus of work examines this extraction and its social and environmental corollaries (Al-Nakib 2016; Al-Sabah 2017; Crystal 1990; Fuccaro and Limbert 2023; Hanieh 2024; Heard-Bey 2017; Jones 2010; Mitchell 2002; Morton 2017; Ramos 2022; Vitalis 2007; Zahlan 2016). One area of study is the initial opening of the extractive zone in Arabia and the need to subordinate space into sites of commodity production. The valorisation of sub-soil hydrocarbon reserves required a 'new territorial regime that could properly domesticate, discipline, and organize the new extraction economy' (Ramos 2022, 66). Research on this spatial reorganisation has tended to focus on the social and human dimensions of the oil frontier. The environmental and ecological facets of reordering remain less well studied. Research on the way the oil frontier can 'incorporate complex ecologies and consolidate the work of humans and the rest of nature' remains incomplete (Marley 2016, 4).

In response, this article considers how the British authorities initiated the oil frontier in Arabia during the 1930s–1940s. This opening was incumbent on the transformation of space into territory, a reorganisation that had to contend with a world that was unshaped by the structures of modern governability. The exploration and scouting that was necessary for the development of oil were hampered by the absence of roads, the terrain, and an indigenous population that, from the perspective of oil companies and colonial officials, was recalcitrant to oil extraction. As a result, areas that were suspected to contain oil reserves were difficult to access and geological surveys could not proceed.

I argue here that a non-human species provided the opportunity to overcome these problems. During the Second World War, swarms of desert locusts that appeared across the Middle East were considered to be a risk to food security in a region already subject to shortages as a result of the global conflict. In response to this problem, in 1943 the British government established the Middle East Anti-Locust Unit (MEALU), a contingent of military personnel that launched a major operation against the locusts. More than 800 military and civilian officials and almost 400 vehicles roamed the Trucial States, Oman and Saudi Arabia to spot swarms and lay poison in order to kill the locusts.

Based on evidence from the Indian Office archives, I contend that the locust played a central, but brief, part in the territorialisation of the Arabian oil frontier. Firstly, the effort to combat the insect created a plausible justification for access to the expanse of the Trucial Coast, Oman and Saudi Arabia, allowing scouting and exploration with cars and planes. These expeditions resulted in some of the first European maps of areas such as the Rub al-Khali (Empty Quarter), and oil companies used their observations to plan more extensive geological surveys. Secondly, the operations of the MEALU provided a means to obtain a broader understanding of the region's social and environmental geography. The knowledge that was gathered in the course of operations against the locust allowed the British colonial authorities a better understanding of tribal territory. Lastly, and more abstractly, the locust provided the opportunity to reorganise space by performing technological capacity, movement and power that embodied the modernity required to achieve the state system necessary for the extractive frontier.

Through an examination of this case, this article contends that the opening of the oil frontier in Arabia was not a linear process. Rather, the task of territorialisation was achieved through an array of interactions with locally specific social and environmental dynamics. It was the outcome of 'momentary stabilizations and continuous shifts in assemblages of humans and nonhumans' (Richardson and Weszkalnys 2014, 22). An exploration of this political ecology creates an opportunity to contribute to the contemporary environmental history of the Arabian Peninsula and the arid spaces of the Middle East. The emphasis on the social dimension of oil extraction has meant that the non-human has been overlooked, obfuscating the lifeworld on which the frontier was established. The colonial imaginary has reduced the environment of the Middle East and North Africa to tropes of barren scarcity and terra nullius; a 'regime of emptiness' that enabled objectives of control and extraction (Henni 2022). By examining the relationship between territorialisation and the locust, this article responds to this distortion. It emphasises the 'complex social, cultural, and ecological worlds' of desert space and the way they were mediated by extractive capitalism (Meche 2019, 72). The case of the locust on the oil frontier illustrates how both material reality and discursive construction are combined to create a desert 'technozone' for logics of control, commodification and conquest (Koch 2021, 14).

## 1 | Territory on the Frontier

An extractive frontier is a place of rupture. A locale in which commodification is achieved through social and environmental violence, disorder and reorganisation (Beckert et al. 2021; Campling 2012; Moore 2010). The internal dynamics of a frontier mediate a range of social and environmental participants; 'they are the encounter zones between capital and all kinds of nature-humans included' (Patel and Moore 2018, 18). A resource frontier depends on the conversion of space into territory; a process that hinges on forms of social (re)ordering. The spaces of natural resources are a consequence of geological history, but their extraction and valorisation depends on a configuration of social organisation. Resource production requires a process of exploration and demarcation; space must be subject to a regime of ownership and the established systems of use value must be destroyed (Blomley 2017; Corson 2011; Rasmussen and Lund 2018; Sack 1983). In this sense, territorialisation has two phases. The initial stage, in which a frontier dynamic removes 'existing social orders—property systems, political jurisdictions, rights, and social contracts'—and a second phase in which space is reordered and recreated (Rasmussen and Lund 2018, 388).

The relation between space and territory is the subject of a substantial corpus of work (Agnew 1994; Delaney 2005; Elden 2013; Sack 1983; Sassen 2006). The formation of social space is pertinent to extractivism. Resources can only be of value once they are defined, owned and controlled, and for that to occur, territory must be created. According to Vandergeest and Peluso (1995, 388), 'it is about excluding or including people within particular geographic boundaries, and about controlling what people do and their access to natural resources within those boundaries'. In the most direct form, territory is created by 'political technology' (Elden 2013, 322). This is manifest in the 'techniques for measuring land and controlling terrain' (Elden 2013, 323). This embodies the process of mapping and exploration which was manifest in the access and mobility of the anti-locust patrols.

Territory is established by displays of power and behaviours; it is an effect of social-technical practice, 'the products of networked relations involving both human and non-human actors' (Painter 2010, 1096). The creation of territory is ideational. It requires the introduction of new narratives about a space, its purpose and the practice used to govern it. The imposition of exchange value, the representations of modernity and the transformation of space and time through infrastructure and modes of transport are a part of the alterations on which new territory is built. In this sense, 'boundaries are therefore not merely lines on the ground but, above all, manifestations of social practice and discourse' (Paasi 1998, 75). In this context, territory is the process of material and discursive redefinition; it is 'an expression of the fusion of meaning, power, and social space' (Delaney 2009, 196). This reordering and imposition may be subject to challenge, but it is facilitated by a projection of hegemony to reconfigure; it is 'claiming the power to govern territorially' (Peluso and Lund 2011, 673).

The governance of the locust provided a means through which colonial rule could exert knowledge, power and techno-political prowess over space. The insect was complementary to British authorities, who could use it to serve their wider objective of power and control over the region's people and resources. In this sense, the anti-locust patrols provided a moral purpose in a zone where authority, space and time were in transformation. This purpose enacted technology, pest management, developmental

science and environmental control, creating the 'hegemon's claim to enact history, produce territory, bring progress, and create knowledge' (Acosta García and Fold 2022, 194).

Some humans utilised the locust to achieve the objective of territorialisation. The relationship between British officials, oil company employees and the locust was non-linear, opportunistic and speculative. This was a moment of expedient interaction. This alliance relied on the behaviour of the locust, which has a particular spatial and temporal pattern that advanced territorialisation. They are highly mobile and can travel distances of up to 200 km a day and can move across large areas of land and sea. Their movement is unpredictable as they tend to travel in the same direction as the prevailing wind. As a result, it rationalised the unlimited movement and exploration of the anti-locust patrols.

The unique character of the locust and its interactions with humans and governments has been observed by other scholars. In other historical cases, the behaviour of locusts provided an opportunity for state powers to pursue objectives of consolidation and control of territory in the colony or in the periphery (Dolbee 2023). Zeynep Akçakaya (2024) describes how the Ottoman state took advantage of the problem in order to assert its agenda of state building and control over population in the East of its territory. She argues that the dominant state discourse of science and modernity was

> continuously co-shaped by the agency of resilient locusts, humans labeled as ignorant and a state publicized as advanced and progressive. Locusts did not speak but could map the landscape, become allies of humans, and act as agents in their own right.
>
> (Akçakaya 2024, 6)

The locust's character and its relationship with state objectives has been observed by others. Claude Peloquin (2013) illustrated how locust swarms provided a means for France to reassert imperial power in North Africa during the Second World War. The movement of locust swarms across boundaries rationalised governance that transcended state borders and impelled displays of techno-political intervention. This spatiality 'made locust control a field of intervention through which multiple challenges to colonial statecraft could be overcome' (Peloquin 2013, 111).

Humans have their own agendas. The imperial objective to incorporate 'unknown' spaces uses the justification of crisis management and counter insurgency (Benton 2005; Peluso and Vandergeest 2011). In this case the anti-locust patrols were used by individuals such as Wilfred Thesiger (a well-known British explorer) to launch conquests of spaces such as the Rub al-Khali, considered to be unexplored wilderness. In turn, these ambitions were exploited by oil companies, who were keen to gather geological data over such areas. The utilisation of the locust swarms to explore, map, probe and condition was less a premeditated plan and more opportunism on behalf of colonial and oil industry officials. The frontier as a zone created by a combination of personal and imperial objectives, and the need to conquer, creates a "space of desire", defined by greed, opportunism and instability (Tsing 2003, 5102).

## 2 | The Early Arabian Oil Frontier

During the course of the 20th century, some of the world's largest reserves of oil and gas were discovered in the Middle East. On the Arabian Peninsula, the first discovery took place in Bahrain in 1932, and discoveries in other Gulf states followed thereafter (Balfour-Paul 1991). This was the start of the oil frontier, a rift predicated on the 'destruction of property systems, political structures, social relations, and life-worlds' (Rasmussen and Lund 2018, 389). However, the opening and stabilisation of this frontier was not a predetermined process. Discovering oil, extracting it and subjecting it to a socio-legal regime of ownership was fraught with doubt. Rather than a linear or assured endeavour, the early Arabian oil frontier was defined by 'fundamental uncertainty' (Hindelang 2023, 58).

The opening of the extractive zone required a comprehensive reorganisation of space; it was contingent on the imposition of private property rights and the establishment of state sovereignty, principles that were weak on the Arabian Peninsula at the advent of the oil era (Peterson 2011). Territory in most parts of Arabia was organised by tribal custom and the boundaries of state sovereignty were unclear. National borders, which encompassed sparsely inhabited areas, were largely unmarked and impermanent. States' territorial claims were often made on the basis of the land used by nomadic tribes that were aligned with the rulers of these states. This indigenous notion of territory was incomprehensible to the British authorities and in order for a system of resource ownership to be e a delineation of sovereignty, property and territory had to be established. The development of oil discoveries into commercial reserves depended on the transformation of society and ecology into a new territorial regime (Jones 2010; Joseph 2018; Limbert 2010; MacLean 2023).

Territorialisation became more urgent as competition over oil concessions intensified (Zaga 2021). In the 1930s, a handful of oil companies were in competition to gain leverage and obtain concessions from the region's rulers. This rivalry was heightened by the role of the American and British governments, which had an interest in control of the region's oil. This was the case for two of the biggest oil companies in the region, the Iraqi Petroleum Company (IPC) and the Standard Oil Company of California (SOCAL), which were backed by the United Kingdom and United States, respectively. One objective of these oil companies was the clarification of state boundaries. In 1933, SOCAL signed a concession with the Government of Saudi Arabia for the area of Al-Hassa in the Eastern Province. After the deal was signed, it became apparent that the border of Saudi Arabia with other territories to the southeast of the country was not marked. It was unclear whether the remote Rub al-Khali area was actually within Saudi Arabia at all or whether it was in Oman or the Trucial Coast (Kelly 2018; Morton 2013).

Indigenous hostility was a problem for oil companies (Morton 2013). Exploration parties were often shot at and harassed. Sometimes tribal chiefs demanded money from oil companies before they allowed geological surveys in their domains. An additional problem was the almost complete absence of roads and most travel was made by ship around the coastal areas or by camel (Khalili 2020). These characteristics made large parts of the deep interior difficult to access and as a result more remote

areas, particularly in the Rub al-Khali, had not been subject to geological survey. Some areas had been observed by plane, and features had been identified as potentially appropriate for exploration, but more data were required. A report written by two geologists working for the Anglo-Persian Oil Company who had been sent on a mission to Oman in 1925 concluded that 'systematic exploration of the Arabian Peninsula, or indeed its fringes, is greatly hampered by formidable natural barriers and by the still more serious obstacles caused by the independent spirit of its inhabitants' (Morton 2013, 36).

As the oil frontier became more frenetic, indigenous resistance was becoming a major hurdle. In January 1939, a British official discussed the attempt by an oil company called Petroleum Concessions Limited (PCL) to explore the Buraimi area of the Trucial Coast. The official remarked that there was hostility to the oil company's representatives from tribal elders in the region. According to him:

> The attitude of the local tribes towards these parties is best summed up in the words ... "We don't want your oil, we don't want your money, we don't like your cars. We're quite content with our camels, our dates, and our old way of life."
>
> (Trucial Hinterland Exploration, n.d.)

He went on to say that this hostility was the main impediment to the development of oil in the region:

> If I had, in order to account for the failure of the exploration, to pick on one main cause underlying the welter of intrigue, and play of personalities of Shaikhs and others, described by Weightman and Howes, I should choose the psychological factor of this local fear and suspicion.
>
> (Trucial Hinterland Exploration, n.d.)

## 3 | A Crisis

After the outbreak of the Second World War in 1939, the prospect of oil wealth and other strategic considerations meant the Arabian Gulf remained a British priority. But their position in the region could not be taken for granted. The area was poor, and the crash in the pearl market in the 1930s had led to an economic depression. Socio-economic hardship was deepened by a series of droughts that caused livestock and crop yields to decline (Carter 2005). The outbreak of war worsened social conditions across Arabia. Shipping routes importing food were disrupted and an Indian export ban on rice caused inflation and food shortages in the Gulf (Woertz 2013). This led to famine conditions, with reports of deaths and significant migration from rural areas to cities (Hayman 2018; Lambert and Hashim 2017).

Amidst this hardship there was anxiety that the Axis powers could attempt to provoke problems in the area. One British official believed that there was a possibility that 'enemy agents' could penetrate the region and 'stir up the tribes against us' (Trucial Hinterland Exploration, n.d.). The British authorities worried that food shortages and poverty could cause instability and threaten their political standing in the region (Henderson 2022). Aiming to manage this problem and ensure that their interests were protected, the British established the Middle East Supply Centre, an office tasked with managing food supplies across the region. In order to address food shortages, it imported as many as 2000 commodities to feed the population.

The British authorities voiced concern about another threat to food security. The arid areas of North Africa, the Middle East, Iran and the Indian subcontinent are the habitat of the desert locust. When these insects gather in swarms, they can devastate large areas of crops. Swarms can be as large as 150 million individuals, each of which eat their own body weight in food a day. As a result of their mobility, they move from their breeding habitat in arid desert areas to semi-arid areas on the periphery of deserts. They are temporally sporadic. Locust eggs can lie dormant for up to 15 years and their population depends on environmental conditions such as moisture levels. Incidents of swarming are unpredictable and their transformation from solitary to gregarious behaviour is determined by the climatic state.

Locust swarms were an occurrence prior to the Second World War, and in the late 1920s, a locust research centre was established in London (Baron 1972). These operations were characterised by techno-political interventions that were typical of colonial environmental management. Techniques used to combat locusts involved the use of trenches in which locusts could be buried or burnt, flamethrowers and later sodium arsenate poison mixed with cereal husk. During the war, the effort to eradicate locusts was intensified, and based on their rhetoric, the British were deeply troubled by the threat that the insect posed to their political status. In 1943, the Deputy Resident Minister of State for the Middle East, Walter Guinness, made a bombastic speech that established the locust as an existential problem.

> In the locust we have an enemy as ruthless as Genghis Khan or Hitler with the same indifference to human rights, equally willing to bring the horrors of famine to men, women and children. Like Hitler, the locust respects no rules of warfare and observes no national frontier.
>
> (Yates 2019, 24)

This construction of a crisis justified an intervention that was on a huge scale. In 1943, the British established the Middle East Anti-Locust Unit (MEALU), which was under the auspices of the Middle East Supply Centre (Yates 2019). The task of the MEALU was to patrol the Trucial States, Oman, Saudi Arabia and Iran in order to monitor swarms and eradicate them. Given that it took place in the middle of the war and that personnel and resources were in short supply, the huge scale of the anti-locust operations is striking. The British Army allocated 329 vehicles, mostly trucks, and 828 men to the operation. The personnel consisted of 25 British officers, 443 British personnel and 360 Palestinians (Yates 2019). The inclusion of Palestinian personnel was a result of the involvement of two General Transport Companies, which were based in British-occupied Palestine. In addition to enlisted men, the units also used Sudanese civilians who worked for the British administration and local labourers.

The logistical effort behind the campaign was substantial. Vehicles often travelled up to 40 miles a day in rough terrain and the units had to be self-sufficient, which meant that they relied on the ability to repair their own equipment.[1] Personnel included drivers, mechanics, signallers, quartermasters and medics. The military answered to two commands, the Middle East Command and the Persia and Iraq Command.[2] The unit in the Gulf answered to the latter, which was established in 1942 to protect oil fields in the Gulf from the Soviet Union (Yates 2019). In addition to logistics, the MEALU were also issued with a special gold sovereign that they could use to make purchases of food and equipment (Baron 1972). The anti-locust operations were conducted by patrols that moved across the desert in trucks and jeeps. The bait and poison used to kill the locusts had to be transported and stored at sites across the areas of operations.

The success of the anti-locust operations is debatable. The effectiveness of the tactics is questionable as swarms reoccurred repeatedly throughout the late 1940s and 1950s. Support for the effort among local people was mixed and it was partly determined by class positionality. Owners of plantations (such as date palm groves) supported the effort to tackle the locust, as swarms could devastate their crops. However, the Bedu, nomadic pastoralists, appeared to treat the anti-locust patrols with suspicion, not least because their livestock, such as camels and goats, died after consuming poison bait laid for the locusts (O'Shea 1947, 159). Moreover, rather than a pest, locusts were a part of the diet of Bedu.[3] Hostility to the anti-locust patrols was observed by members of the patrols. In correspondence regarding the anti-locust patrols written in 1944, the British Political Agent said the following:

> A recent visit by a small party of the anti-locust expedition to a part of the Al bu Shamis property at Buraimi met with a rebuff. There are no locusts anywhere in the area and the arrival of men in khaki in army lorries with the stated object of being there to kill locusts which obviously do not exist is treated with a very justifiable suspicion. They are in fact not welcomed.
>
> (Anti-Locust Measures, n.d.-b)

## 4 | Locusts on the Commodity Frontier

The anti-locust patrols served agendas other than pest management. The mechanised movement of the patrols was a sociotechnical practice that produced territoriality. The presence and movement of the anti-locust patrols across the expanse of the region was a means to organise space in a way that was conducive to the oil frontier. It provided the means to explore and map and also assert control and meaning. There was not a singular grand vision for the region, rather a moment of interaction that served the development of the oil frontier. Some British officials viewed the anti-locust operation with scepticism and hostility. Some of the individuals involved in the patrols were motivated by a desire to explore and conquer wilderness. The locust swarms were capricious, and their unpredictable appearance in time and space did not necessarily correspond with the presence of the anti-locust patrols across huge swathes of land.

The anti-locust operation allowed the accumulation of control and power over space. The logistics for the operation encompassed the whole region and the patrols were based in Sharjah in present day UAE and in Dahran in Saudi Arabia. Patrols were attempted by aircraft, but the most effective way of spotting locusts was on overland missions by vehicles. Permission for these operations was granted by the rulers of the states and the Trucial States, Oman and Saudi Arabia allowed the entry of these teams into their territory. There were sensitivities and King Abulaziz of Saudi Arabia allowed the locust patrols on the basis that they did not wear military ranks and only officers were permitted to carry sidearms. However, he refused to grant permission for the use of airplanes over Saudi territory (Anti-Locust Measures, n.d.-a).

Of particular importance to the opening of the oil frontier was the automobile, both as a means of access but also as a representation of modernity. According to Matt MacLean (2023, 323), its presence produced the spatial imaginaries that gave meaning to the reorganisation of territory: 'While British diplomats drew boundaries, it was motor power and a road network that brought those boundaries to life'. The anti-locust people and their movement across this space provided a justification for the use of the car and its movement. The patrols resulted in the opening of routes and tracks through areas of the Trucial Coast, Oman and Saudi Arabia (Heard 2011, 482). The first track from the Persian Gulf coast in modern-day UAE and the Batinah coast in modern-day Oman was opened up by the MEALU in 1943. According to the archive documents, they built a motor track from Sharjah to Al Dhaid in the Trucial Coast. They also drove from Sharjah to the Hasa province in Saudi Arabia (Trucial Hinterland Exploration, n.d.).

The objective of the locust campaign provided a plausible rationale for access to areas in which local people did not permit foreigners, particularly those suspected of working for oil companies. In one incident in 1946, an anti-locust patrol was fired upon by local residents while travelling from Buraimi to Muscat in Oman. The tribesmen thought the group was a party of geologists who were conducting surveys for an oil company, but once they were identified as belonging to the MEALU, they were allowed to proceed (Trucial Coast Diaries, n.d.).

As a result of this access, the patrols allowed the opportunity to conduct research on the region's population. The parties of locust patrols served as a means to condition the locals to the sight of foreigners. In this sense, they were viewed as guinea pigs, a useful way of observing local reactions to the appearance of Europeans. Some British officials and oil company employees treated the anti-locust employees as an object of ridicule but also understood the benefit of their presence. In a 1944 letter from a PCL employee to IPC headquarters in London, it was hoped that it would be possible to speak to someone from MEALU and 'benefit from their experience' (Coll 30/110(4) 1948). The letter stated that:

> The Political Agent takes the view that the inhabitants of these remote areas are less likely to resent the

> appearance of motor convoys in their territories in future as a result of the locusts party's visits. The fact also that they tolerated the visitors, although expressing open disbelief in the purpose of the visits, lends support to the assumption that the appearance of oil survey parties will not be obstructed.
>
> (Coll 30/110(4) 1948)

In 1945, a representative of IPC in the UAE wrote that the anti-locust patrols were conditioning locals to the presence of foreigners in cars. According to him, 'the locust men are apparently harmless people whom it pleases the Government to send in hunting locusts, they also are tolerated. Nevertheless they are moving about in cars, with no attempt at dressing up as Arabs, and they are accustomed to these novelties' (Trucial Hinterland Exploration, n.d.).

Personal ambition to use the anti-locust patrols to conquer territory and fulfil a desire to explore was manifest in decisions made by the locust operation. In 1944, one of the officers of the anti-locust patrol, Vesey Fitzgerald, wrote to the Political Agent in Bahrain to request permission to access Buraimi, over which there were competing claims of sovereignty by Oman, the Trucial Coast and Saudi Arabia. The response of the agent suggests that exploration was often considered the more important objective of the patrols:

> The anti-locusts people seemed to be delightfully vague about the possibility of breeding in the Buraimi-Ibri area ... I received the impression that Mr. Fitzgerald is anxious to have something to show for his season's work which up to now, owing to the absence of locusts, has proved unproductive. The interior of Oman is virtually unexplored and it would certainly be something of an achievement outside of anti-locust work if he succeeded in making a thorough examination of the area.
>
> (Anti-Locust Measures, n.d.-b)

As locust patrols were some of the few British personnel who were allowed to enter Saudi Arabia, this allowed access to the Rub al-Khali, a huge expanse of desert in the southeast of the country. Maps of the region were prepared by two officers in the MEALU. In 1945, Wilfred Thesiger made a crossing of the Rub al-Khali, allegedly the third European to do so. His trip was financed by the MEALU, supposedly as this area was a breeding site of locusts. His map was one of the first of this region and it is a remarkably detailed study of water wells, springs and geological features, the type of landmarks that could be used to decipher the layout of tribal territory.[4]

Thesiger's research was not undertaken for oil companies, and he claimed to resent the industry and the changes that he thought it would bring to traditional life in Arabia. However, he was aware of the value of his research. In his book *Arabian Sands* (Thesiger 1959), he described two mountains in present-day Oman and their geological potential for oil exploration.[5] He was later lauded by a regional representative of the Iraq Petroleum Company who wrote in 1953 that "Thesiger's claim to fame was earned by virtue of some first-class exploration work" (Morton 2013, 48). According to Michael Morton (2013, 3), his 'travels also yielded practical details that assisted the oil companies. His maps, intelligence about the tribes and routes through the desert were all matters of great interest to IPC and the British Foreign Office'.

Publicly, however, British officials were careful to keep the oil industry and the anti-locust campaign apart. In 1945, IPC officials proposed that a geologist be included within a planned expedition of locust people. However, British officials objected on the basis that it could jeopardise the locust operation, but also the aim of signing oil concessions with local sheikhs. The agent acknowledged that there was growing scepticism over the purpose of the anti-locust patrols and that the inclusion of a geologist in the team might exacerbate these suspicions:

> It is true that tribal leaders found it difficult to credit that last season's anti-locust campaign was solely concerned with the extermination of those insects, but I see no reason why we should confirm their doubts of our veracity by introducing oil geologists into the party this season. I consider that the anti-locust party should not be connected in any way with any commercial enterprise for if it were it is not improbable that it might meet with opposition in certain parts of the desert areas.
>
> (Coll 30/110(4) 1948)

The agent instead counselled a more patient strategy and argued that with time the presence of the anti-locust teams would be to the advantage of the IPC:

> With close contact which is now being established daily with the more remote tribes of the interior I consider that when they recommence operations it is unlikely that Messrs. Petroleum Concession Limited will have any serious difficulty in their exploration work.
>
> (Coll 30/110(4) 1948)

Following the end of the war, the utility of the anti-locust patrols as a means to territorialise the frontier decreased. The British attempted to encourage Arab governments to fund their own anti-locust patrols but were unsuccessful. The centre of the operations moved from Sharjah to Nairobi in Kenya (Heard 2011). Moreover, through the 1950s swarms of the scale that appeared in the 1930s and 1940s fell in number, and as a result appeared to have become a less urgent concern (Baron 1972). The locust patrols continued to operate in the post-war period but with fewer resources and less support. The attitude of some British officials toward the anti-locust initiative remained one of disdain. In 1950, the Political Agent Edward Henderson expressed his view that their operations were a threat to British interests. In one incident, an anti-locust party was robbed at gunpoint in Ras

al-Khaimah. Henderson wrote that 'news of the robbery of the anti-locust mission spread throughout Oman to the detriment of our prestige. If they are to continue their activities, travelling in this part of the world will become hazardous' (Heard 2011, 362). A few months later, he continued to express his disapproval:

> The anti-locusts are still with us, as are the locusts. Neither in very strong force. They now have no one here with any even professed knowledge of the locust or of Arabic ... The fact that they get into trouble when they go out does not cause surprise. Fortunately they usually stay at home.
>
> (Heard 2011, 362)

In the 1950s, the project of territorialisation in the oil frontier continued. Boundary negotiations continued. In 1955, the oasis of Buraimi was at the centre of a conflict between Saudi Arabia and an alliance between Oman and the Trucial States. The territorial dispute was eventually settled in 1974. As this space was reorganised oil extraction accelerated, and the first successful well was established in 1950 in the Trucial States and 1955 in Oman. In Saudi Arabia, production was expanded throughout the post-war era. As the use of the automobile became more common and the development of a road network expanded, the significance of the automobile as a means to reorganise territory became more evident. In one incident in the Trucial States, a sheikh tried to block a road in territory belonging to another sheikh, leading to a brief skirmish. In response, the British initiated an agreement whereby the car would be exempt from the restrictions on movement of tribal law (MacLean 2023, 307).

This territorial transformation was manifest in other changes that were intrinsic to the oil era. In order to curry favour with local sheikhs and create socio-economic stability, the British assisted local rulers with agricultural improvements by digging wells and expanding irrigation networks (Bradshaw 2014). This was concomitant with an increase in the use of agricultural techniques such as water pumps, machinery, seeds and pesticides. The locust operations were a part of this effort, and the exertion of development science played a role in the social and environmental pacification necessary for the oil frontier. According to Sabrina Joseph (2018, 694), 'the technological dimensions of modern agriculture reminded local populations of the state's power'. Based on this, the oil frontier was opened and stabilised by a series of territorial practices; a sequence initiated by practices such as the locust patrols and followed by more direct explicit interventions into land and agriculture. In this sense, territorialisation is not a static process and is subject to constant shifts and definition through social activity; it is subject to a 'processual ontology which implies that territory is never something that 'just is'; territory is always becoming' (Lövbrand and Stripple 2006, 233).

## 5 | Conclusion

This article proposes that the locust played a brief role in the opening of the Arabian oil commodity frontier. The insect provided a justification for the exploration and opening of Southwest Arabia. The spatial and temporal variability of the locust was an ideal pretext to move across national, social and environmental boundaries. The scale and power of the swarms justified interventions amid a moment of transformation and upheaval, created by the internal dynamics of a frontier. This is partly a familiar story of techno-scientific performance used as a means to control and modernise. The display of technologies such as poison, the plane and the car played a role in shifts in ecological relations that accompany frontier movements. The killing of a species with technological means on a mass scale created a rift within the human–nature relation that would widen as the oil frontier became established. The use of planes, trucks, poison, flame throwers and other forms of oil-based technology was the manifestation of petro-culture in the region, a disruption that would later radically change the region as it began to accrue vast oil wealth. The designation of a species as a pest, and its indiscriminate mass killing by technology, is part of the history of the colonial imaginary of arid land. It is the practice of great violence in the desert, based on the perception of such environments 'as empty and lifeless spaces' thus 'providing the conceptual justification for brutal, conscienceless, and life-threatening actions' (El Guabli 2022, 8).

Absent from this account is an indigenous voice. With this considered, British claims about how local communities viewed the anti-locust patrols should be taken with caution. As a result of this imbalance, the agency of local rulers and peoples to shape British objectives is hard to measure. Obviously, there was scepticism. One of the reasons that the British attempt to establish a joint anti-locust organisation funded by Arab governments failed was because of suspicion that the initiative was motivated by ulterior British motives (Heard 2011).

It should also be stressed that the discovery of oil was not contingent on the locust. If it was not the locust, it would have been something else. Imperial power would have found another pretext for access. However, the locust provided a useful rationale at that moment. It was a means to uphold the hegemony of the empire; the need for oil exploration was masked by a supposedly benign objective, which was a tool in the delicate diplomacy between the different states and tribes that were stakeholders in the extraction of oil. The existence and behaviour of this insect allowed the articulation of these interests and stratagems.

This case is a redress to the determinism that excludes much of the ecological relations that are participants in the broader social and environmental complexity that embodied oil extraction. Today, a visitor to a city such as Dubai, Abu Dhabi or Riyadh, places that are a manifestation of the incredible wealth and power that has been generated by oil, might be incredulous that the extraction of the oil commodity momentarily interacted with an insect. Indeed, the locust is mostly absent from the urban environments of the region, and visitors and residents might not ever see them, nor imagine their presence.

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### Conflicts of Interest

The author declares no conflicts of interest.

### Data Availability Statement

Research data are not shared.

### Endnotes

[1] Photos of these patrols are available at the Imperial War Museum online archive (see Heaney 1943).

[2] The military nature of these units was apparent in their dress. In the Trucial Coast and Oman, they wore British military dress and carried firearms. In Saudi Arabia, units were not allowed to wear British military dress and wore Arab head dress with different colours that indicated ranks.

[3] One British officer wrote in his memoir of his time serving in Oman and the Trucial Coast: 'From the propertied sheikhs, on the other hand, the Commission receives every assistance, as they are anxious to keep the pests away from their crops. The Bedouins, who do no work and grow nothing but a little millet or tobacco, are not interested in locust suppression; in fact, locusts form a part of their diet' (O'Shea 1947, 159). In another example of locusts forming part of the local diet, one British woman living in Kuwait in the 1930s recalled the following scene: 'They'd take off the kufiyahs—head scarves—and knock the flying ones down and catch them … When I went calling on ladies here they would always bring a tray of fat boiled locusts and take off the heads and the legs and the wings and then offer them. The Bedu dried them on their tents and kept them all year. The salukis ate them, the donkeys ate them and the people ate them. The Bedu were really happy when they came' (Hobson and Lawton 1987).

[4] In 1952, another MEALU official made a trip from Al-Ain to Liwa, and he produced a map of the region. His account of the trip has some mention of locusts but far more discussion about plant species and topography. The locations of wells and springs were important as they provided a basis for territorial claims by states, on the basis that they belonged to various tribes who had paid allegiance to state authorities.

[5] 'Both of them were dome-shaped, and I thought regretfully that their formation was of the sort which geologists associate with oil. But, even so, I did not anticipate that eight years later an oil company would have established a camp, made an airfield, and be drilling at Fahud not more than forty miles away' (Thesiger 1959, 314).

### References


Acosta García, N., and N. Fold. 2022. "The Coloniality of Power on the Green Frontier: Commodities and Violent Territorialisation in Colombia's Amazon." *Geoforum* 128: 192–201. https://doi.org/10.1016/j.geoforum.2021.11.025.

Agnew, J. 1994. "The Territorial Trap: The Geographical Assumptions of International Relations Theory." *Review of International Political Economy* 1, no. 1: 53–80. https://doi.org/10.1080/09692299408434268.

Akçakaya, Z. 2024. "Resilient Locusts, Ignorant People, Modern State and Scientific Knowledge: A Late Ottoman Human-Animal-State History." *Middle Eastern Studies* 61: 194–202. https://doi.org/10.1080/00263206.2024.2415986.

Al-Nakib, F. 2016. *Kuwait Transformed: A History of Oil and Urban Life*. Stanford University Press. https://doi.org/10.1515/9780804798570.

Al-Sabah, Y. S. F. 2017. *The Oil Economy of Kuwait*. Routledge. https://doi.org/10.4324/9781315160016.

Anti-Locust Measures. n.d.-a. "File 16/37A-I Anti-Locust Measures, British Library: India Office Records and Private Papers, IOR/R/15/2/1544, 31 Aug 1942–18 May 1943." *Qatar Digital Library*. Accessed December 11, 2025. https://www.qdl.qa/en/archive/81055/vdc_100000000282.0x000117.

Anti-Locust Measures. n.d.-b. "File 16/37 A II Anti Locust Measures, British Library: India Office Records and Private Papers, IOR/R/15/2/1545, 16 May 1943–24 Apr 1952." *Qatar Digital Library*. Accessed December 11, 2025. https://www.qdl.qa/en/archive/81055/vdc_100000000282.0x000118.

Balfour-Paul, G. 1991. *The End of Empire in the Middle East: Britain's Relinquishment of Power in Her Last Three Arab Dependencies*. Cambridge University Press.

Baron, S. R. 1972. *The Desert Locust*. Methuen.

Beckert, S., U. Bosma, M. Schneider, and E. Vanhaute. 2021. "Commodity Frontiers and the Transformation of the Global Countryside: A Research Agenda." *Journal of Global History* 16, no. 3: 435–450. https://doi.org/10.1017/S1740022820000455.

Benton, L. 2005. "Legal Spaces of Empire: Piracy and the Origins of Ocean Regionalism." *Comparative Studies in Society and History* 47, no. 4: 700–724. https://doi.org/10.1017/S0010417505000320.

Blomley, N. 2017. "The Territorialization of Property in Land: Space, Power and Practice." *Territory, Politics, Governance* 7, no. 2: 233–249. https://doi.org/10.1080/21622671.2017.1359107.

Bradshaw, T. 2014. "The Dead Hand of the Treasury: The Economic and Social Development of the Trucial States, 1948–60." *Middle Eastern Studies* 50, no. 2: 325–342. https://doi.org/10.1080/00263206.2013.870896.

Campling, L. 2012. "The Tuna "Commodity Frontier": Business Strategies and Environment in the Industrial Tuna Fisheries of the Western Indian Ocean." *Journal of Agrarian Change* 12, no. 2–3: 252–278. https://doi.org/10.1111/j.1471-0366.2011.00354.x.

Carter, R. 2005. "The History and Prehistory of Pearling in the Persian Gulf." *Journal of the Economic and Social History of the Orient* 48, no. 2: 2.

Coll 30/110(4). 1948. "Coll 30/110(4) 'Trucial Coast Oil Concession: Muscat Oil Concession. Hinterland Exploration & Survey', British Library: India Office Records and Private Papers, IOR/L/PS/12/3838, 18 Jan 1945–22 Mar 1948." *Qatar Digital Library*. Accessed December 11, 2025. https://www.qdl.qa/en/archive/81055/vdc_100000000648.0x000196.

Corson, C. 2011. "Territorialization, Enclosure and Neoliberalism: Non-State Influence in Struggles Over Madagascar's Forests." *Journal of Peasant Studies* 38, no. 4: 703–726. https://doi.org/10.1080/03066150.2011.607696.

Crystal, J. 1990. *Oil and Politics in the Gulf: Rulers and Merchants in Kuwait and Qatar*. Cambridge University Press.

Delaney, D. 2005. *Territory: A Short Introduction*. Blackwell.

Delaney, D. 2009. "Territory and Territoriality." *International Encyclopedia of Human Geography*. https://doi.org/10.1016/B978-008044910-4.00808-7.

Dolbee, S. 2023. *Locusts of Power: Borders, Empire, and Environment in the Modern Middle East*. Cambridge University Press.

El Guabli, B. 2022. "Saharanism in the Sonoran." *Avery Review* 58. https://averyreview.com/issues/58/saharanism-in-the-sonoran.

Elden, S. 2013. *The Birth of Territory*. University of Chicago Press.

Fuccaro, N., and M. E. Limbert. 2023. *Life Worlds of Middle Eastern Oil: Histories and Ethnographies of Black Gold*. Edinburgh University Press.

Hanieh, A. 2024. *Crude Capitalism: Oil, Corporate Power, and the Making of the World Market*. Verso.

Hayman, M. 2018. "Economic Protectorate in Britain's Informal Empire: The Trucial Coast During the Second World War." *Journal of Imperial and Commonwealth History* 46, no. 2: 323–344. https://doi.org/10.1080/03086534.2018.1438965.

Heaney, J. T. 1943. *British Expeditionary Force to Fight Locusts in the Middle East*. Imperial War Museum.

Heard, D. 2011. *From Pearls to Oil: How the Oil Industry Came to The United Arab Emirates*. Motivate Publishing.

Heard-Bey, F. 2017. *Abu Dhabi, The United Arab Emirates and the Gulf Region Fifty Years of Transformation*. Gerlach Press.

Henderson, C. 2022. "The Power of Food Security." *Globalizations*. https://doi.org/10.1080/14747731.2022.2075616.

Henni, S. 2022. "Against the Regime of "Emptiness"." In *Deserts Are Not Empty*, edited by S. Henni, 9–22. Columbia University Press.

Hindelang, L. 2023. "Photographing Crude in the Desert: Sight and Sense Among Oil Men." In *Life Worlds of Middle Eastern Oil*, edited by N. Fuccaro and M. Libert, 57–86. Edinburgh University Press.

Hobson, R., and J. Lawton. 1987. "New Battle in an Ancient War." *Aramco World Magazine* 38, no. 3: 6–13.

Jones, T. C. 2010. *Desert Kingdom: How Oil and Water Forged Modern Saudi Arabia*. Harvard University Press.

Joseph, S. 2018. "Farming the Desert: Agriculture in the Oil Frontier, the Case of The United Arab Emirates, 1940s to 1990s." *British Journal of Middle Eastern Studies* 45, no. 5: 678–694.

Kelly, J. B., ed. 2018. *Desert Dispute: The Diplomacy of Boundary-Making in South-Eastern Arabia*. Gerlach Press.

Khalili, L. 2020. *Sinews of War and Trade: Shipping and Capitalism in the Arabian Peninsula*. Verso.

Koch, N. 2021. "The Political Lives of Deserts." *Annals of the American Association of Geographers* 111, no. 1: 87–104. https://doi.org/10.1080/24694452.2020.1766410.

Lambert, L. A., and H. B. Hashim. 2017. "A Century of Saudi-Qatari Food Insecurity: Paradigmatic Shifts in the Geopolitics, Economics and Sustainability of Gulf States Animal Agriculture." *Arab World Geographer* 20, no. 4: 4. https://doi.org/10.5555/1480-6800.20.4.261.

Limbert, M. E. 2010. *In the Time of Oil: Piety, Memory, and Social Life in an Omani Town*. Stanford University Press.

Lövbrand, E., and J. Stripple. 2006. "The Climate as Political Space: On the Territorialization of the Global Carbon Cycle." *Review of International Studies* 32, no. 22: 217–235. https://doi.org/10.1017/S0260210506006991.

MacLean, M. 2023. "Oil, Mobility and Territoriality in the Trucial States/United Arab Emirates, Muscat and Oman." In *Life Worlds of Middle Eastern Oil*, edited by N. Fuccaro and M. Limbert, 298–327. Edinburgh University Press.

Marley, B. J. 2016. "Coal Crisis in Appalachia: Agrarian Transformation, Commodity Frontiers and the Geographies of Capital." *Journal of Agrarian Change* 16, no. 2: 225–254. https://doi.org/10.1111/joac.12104.

Meche, B. 2019. "Bad Things Happen in the Desert: Mapping Security Regimes in the West African Sahel and the 'Problem' of Arid Spaces." In *A Research Agenda for Military Geographies*, edited by R. Woodward, 70–83. Edward Elgar.

Mitchell, T. 2002. *Rule of Experts: Egypt, Techno-Politics, Modernity*. University of California Press.

Moore, J. W. 2010. "Cheap Food and Bad Money: Food, Frontiers, and Financialization in the Rise and Demise of Neoliberalism." *Review (Fernand Braudel Center)* 33, no. 2/3: 225–261.

Morton, M. Q. 2013. *Buraimi: The Struggle for Power, Influence and Oil in Arabia*. IB Tauris.

Morton, M. Q. 2017. *Empires and Anarchies: A History of Oil in the Middle East*. Reaktion Books.

O'Shea, R. 1947. *The Sand Kings of Oman: Being the Experiences of an R.A.F. Officer in the Little Known Regions of Trucial Oman Arabia*. Methuen.

Paasi, A. 1998. "Boundaries as Social Processes: Territoriality in the World of Flows." *Geopolitics* 3, no. 1: 69–88. https://doi.org/10.1080/14650049808407608.

Painter, J. 2010. "Rethinking Territory." *Antipode* 42, no. 5: 1090–1118. https://doi.org/10.1111/j.1467-8330.2010.00795.x.

Patel, R., and J. W. Moore. 2018. *A History of the World in Seven Cheap Things: A Guide to Capitalism, Nature, and the Future of the Planet*. Verso.

Peloquin, C. 2013. "Locust Swarms and the Spatial Techno-Politics of the French Resistance in World War II." *Geoforum* 49: 103–113. https://doi.org/10.1016/j.geoforum.2013.06.005.

Peluso, N. L., and C. Lund. 2011. "New Frontiers of Land Control: Introduction." *Journal of Peasant Studies* 38, no. 4: 667–681. https://doi.org/10.1080/03066150.2011.607692.

Peluso, N. L., and P. Vandergeest. 2011. "Political Ecologies of War and Forests: Counterinsurgencies and the Making of National Natures." *Annals of the Association of American Geographers* 101, no. 3: 587–608. https://doi.org/10.1080/00045608.2011.560064.

Peterson, J. E. 2011. "Sovereignty and Boundaries in the Gulf States: Settling the Peripheries." In *The International Politics of the Persian Gulf*, edited by M. Kamrava, 21–49. Syracuse University Press.

Ramos, S. J. 2022. "Mapping the Persian Gulf Petroleumscape: The Production of Territory, Territoriality, and Sovereignty." In *Oil Spaces*, edited by C. Hein, 66–83. Routledge.

Rasmussen, M. B., and C. Lund. 2018. "Reconfiguring Frontier Spaces: The Territorialization of Resource Control." *World Development* 101: 388–399. https://doi.org/10.1016/j.worlddev.2017.01.018.

Richardson, T., and G. Weszkalnys. 2014. "Introduction: Resource Materialities." *Anthropological Quarterly* 87, no. 1: 5–30.

Sack, R. D. 1983. "Human Territoriality: A Theory." *Annals of the Association of American Geographers* 73, no. 1: 55–74. https://doi.org/10.1111/j.1467-8306.1983.tb01396.x.

Sassen, S. 2006. *Territory, Authority, Rights: From Medieval to Global Assemblages*. Princeton University Press.

Thesiger, W. 1959. *Arabian Sands*. Longmans, Green & Co.

Trucial Coast Diaries. n.d. "File 8/25 Political Officer, Trucial Coast Diaries, British Library: India Office Records and Private Papers, IOR/R/15/2/326, 11 Oct 1939–23 Dec 1946." *Qatar Digital Library*. Accessed December 11, 2025. https://www.qdl.qa/en/archive/81055/vdc_100000000241.0x000155.

Trucial Hinterland Exploration. n.d. "86/21 - III B.65. Trucial Hinterland Exploration, British Library: India Office Records and Private Papers, IOR/R/15/1/695, 3 Jan 1939–24 Jul 1945." *Qatar Digital Library*. Accessed December 11, 2025. https://www.qdl.qa/en/archive/81055/vdc_100000000193.0x00 029d.

Tsing, A. L. 2003. "Natural Resources and Capitalist Frontiers." *Economic and Political Weekly* 38, no. 48: 5100–5106.

Vandergeest, P., and N. L. Peluso. 1995. "Territorialization and State Power in Thailand." *Theory and Society* 24, no. 3: 385–426 https://www.jstor.org/stable/658074.

Vitalis, R. 2007. *America's Kingdom: Mythmaking on the Saudi Oil Frontier*. Stanford University Press.

Woertz, E. 2013. *Oil for Food: The Global Food Crisis and the Middle East*. Oxford University Press.

Yates, A. 2019. "The British Military and the Anti-Locust Campaign Across the Arabian Peninsula, Including the Emirates, 1942–1945." *Tribulus: Journal of the Emirates Natural History Group* 7: 22–27.

Zaga, M. 2021. "Framing the Trucial Coast's Tribes: Shifting Notions of Borders and Imperial Influence Before The United Arab Emirates." *Journal of Historical Geography* 73: 36–51. https://doi.org/10.1016/j.jhg.2021.06.004.

Zahlan, R. S. 2016. *The Making of the Modern Gulf States: Kuwait, Bahrain, Qatar, The United Arab Emirates and Oman*. Routledge.