The Impact of the Falklands War (1982) on the Peatland Ecosystem of the Islands

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Abstract

Although the Falkland Islands (52°S) are relatively small (12,000km^2), they are a globally important peatland resource. Most of the soils are classified as peat that has been formed under a unique set of climatic conditions and location-specific circumstances. Their estimated carbon stock is equivalent to 66% of the UK total and more than that of Ireland. Most of the land activity of The Falklands War in 1982 was essentially fought on peatlands though the main battles approaching Stanley were on the quartzite hilltops. However the timing of the action (winter), the relatively short duration of the land conflict and the unpreparedness of the combatants for the peatland conditions, meant that the overall impact on the ecosystem was minimal. A small but significant area of minefields is an unwelcome human legacy (which may have some ecosystem benefits) but a greater number of military and other tourists visiting the main battle sites have the potential to increase awareness of the peatland ecosystem.

Keywords: climate change, overgrazing, farm restructuring, minefields, military tourism, ecosystem services

Introduction

The Falkland Islands

(i) Background

The Falkland Islands are an archipelago of 782 islands (Woods, 2001) situated in the South Atlantic Ocean between latitudes 51°S and 53°S and longitudes 57°W and 62°W. They cover an area of *c.*12,200km^2 (almost exactly the same as Yorkshire or Northern Ireland), and are approximately 500 kilometres from the nearest point on mainland South America. The climate is cool/temperate, oceanic and is characterised by its lack of extremes. Temperatures are maintained at a moderate level with a mean for January of 9.4°C and a mean for July of 2.2°C, and ground frosts can occur throughout the year. Rainfall is low with a mean annual

precipitation at Stanley of 640 mm. Rainfall distribution is associated with the main mountain ranges to the north of both main islands and tends to decline towards the south and west. Rainfall is lowest in spring and this, combined with strong winds, reduces plant growth (McAdam, 1985; Summers & McAdam, 1993). Climatic variation across the Falkland Islands archipelago is poorly understood.

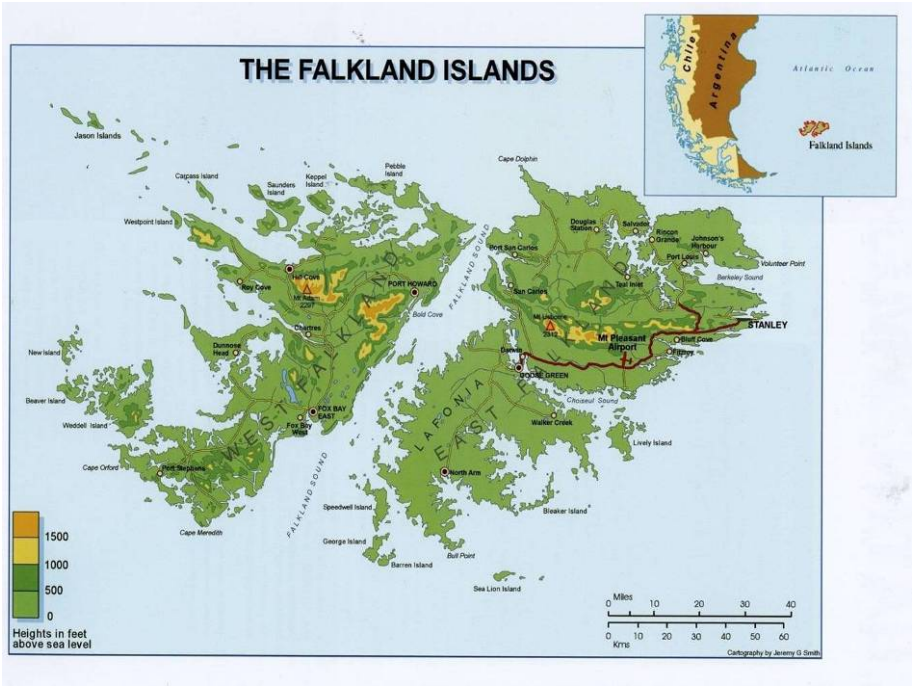

Figure 1: The size and location of the Falkland Islands

(ii) Soils and Vegetation

The topography of the islands is not extreme with the landscape being generally hilly, the tallest mountain, Mt Usborne on East Falkland, is 705m high. The underlying geology is quartzite, sandstones and shales. During the Quaternary, although the islands experienced cold conditions, the only glaciers were those that formed the small cirques on the highest hills. The rest of the land surface was subjected to periglacial, tundra conditions and deep weathering was more-or-less *in situ*. Many areas of exposed, fractured rocks were left which gave the unique landscape feature of periglacial blockfields, locally referred to as “stone runs”. A typical Falkland soil comprises a shallow (usually no deeper than 30cm) peaty horizon overlying a compact, poorly drained, silty clay subsoil. Mineral soils occur in areas wherever the underlying geology is exposed, particularly on mountaintops and in coastal areas. Falkland soils generally are shallow peats (less than 30cm deep) but in places, deposits of 11-12m have been recorded. They have a pH in the range 4.1 to 5.0 and are deficient in calcium and phosphate (Cruickshank, 2001).

The main vegetation types are acid grasslands dominated by *Cortaderia pilosa* (Poaceae) and dwarf shrub heathland dominated by *Empetrum rubrum* (Ericaceae), but other vegetation types of more limited extent may be locally important, particularly around the coasts. Scrub communities dominated by *Chiliotrichum diffusum* (Asteraceae) or *Hebe elliptica* (Plantaginaceae) would have been much more widespread before the introduction of livestock as was a coastal community dominated by the tall grass, *Poa flabellata* (Poaceae), which today survives mainly on small offshore islands. There is no native tree cover.

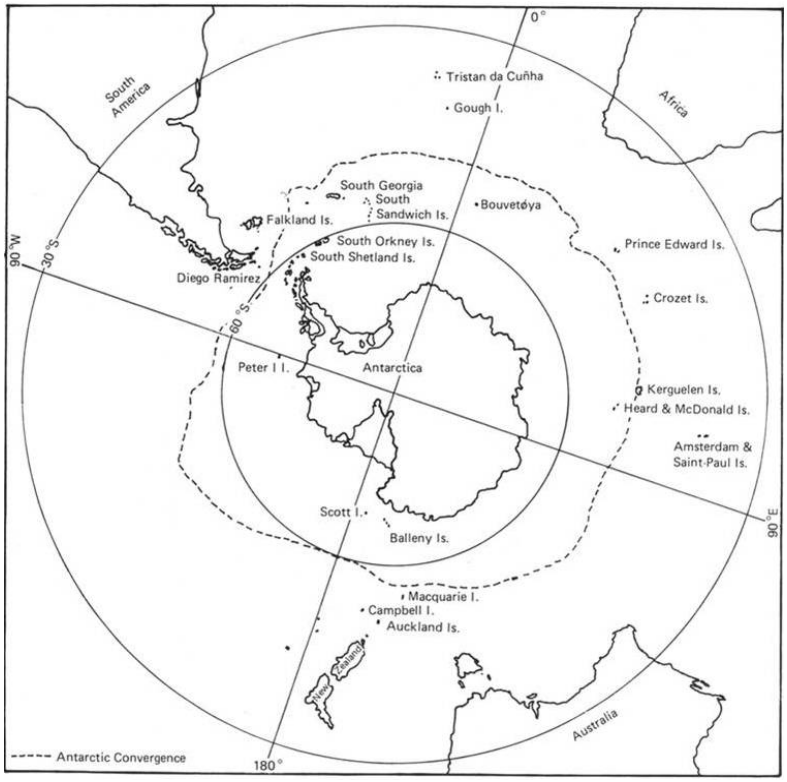

Figure 2: The circumpolar location of the Falkland Islands

(iii) Land Use

The islands had no indigenous human or large ungulate populations and human impact on the landscape only began with the first settlement approximately 250 years ago, when cattle, pigs, sheep and goats were first introduced by French settlers (Summers & McAdam, 1993). Sheep were farmed commercially from the 1860s, numbers increasing up to a maximum of 800,000 in the early 1900s. Stock density declined to about 600,000 by 1930 and remained relatively constant (at a mean stocking density of approximately 1 sheep per 2ha) until early in the 1980s when a programme of farm sub-division was introduced (McAdam,1984a;

Summers & McAdam, 1993). Since then sheep numbers have increased by approximately 20% (Summers, Haydock & Kerr, 1993; Department of Agriculture 2012). Some reseeding has been carried out using introduced European forage species but most of the grassland is extensively grazed. Since the late 1990s, there have been moves to increase the numbers of cattle on the Islands.The rural population is small (3-400 people) and though most are still engaged in agriculture, farm-based tourism has steadily increased in popularity in recent years and become economically more significant than sheep farming on several islands. A rural roads programme, commenced in 1985 with over 900kms having been built to date, has made access to the countryside more widespread.

Peatland in the Falkland Islands

(i) Definition

The IUCN define peatlands as '*areas of land with a naturally accumulated layer of peat formed from carbon-rich dead and decaying plant material under waterlogged conditions*'. Joosten & Clarke 2002, define peats as '*sedentarily accumulated material consisting of at least 30% (dry mass) of dead organic material*'. However, in the Falkland Islands, where the soils can clearly be defined as peats, the rainfall is very low for what would conventionally be regarded as peat formation. Only limited areas are permanently waterlogged. This would suggest that either there was an earlier very wet period (and the pollen record does not indicate this) or peat has formed/is forming in the absence of waterlogging but low temperatures are the factor significantly reducing soil microbial activity. Most soils in the Falklands come under the definition of peat as they have a fibric surface horizon >20% organic C in the upper layers (this is more than the 30% definition of organic material above). In reality, no proper soil survey of the Falklands has been carried out.

All soils in the Falklands have been subject to a long period of chemical weathering, which makes geological differences in soils virtually zero (Cruickshank, 2001).

(ii) Classification

1. Permanently water-logged

Vegetation: Cushion or Bryophyte clump peatland.
Mat forming cushion plant (*Astelia pumila*) usually dominates.
Extent of Sphagnum (e.g. *S. magellanicum*; *S. fimbicatum*) usually restricted to small patches.

These can form mosaic communities with graminoid peatland.

2. Permanently or temporarily waterlogged forming either peat soils or soils with varying organic content.

Vegetation:

a. Graminoid.
b. Dwarf shrub heath.
c. Shrub.

a. Graminoid peatland

Tussac grass – dry coastal habitats.
Acid grassland.
Neutral grassland.
Marshy grassland (e.g. with high *Carex* proportion).
Fen/ Marginal. Very restricted.

b. Dwarf shrub heath

Dwarf shrub heath – *Empetrum rubrum* dominates with *Baccharis magellanica*. In waterlogged areas, there can be rushes and Sphagnum.

c. Shrub

e.g. with *Chiliotrichum diffusum*.

Figure 3: Acid Grassland dominated by *Cortaderia pilosa* is the dominant vegetation type on the islands.

(iii) Extent

Although the land area of the Falklands is not large; given its very high proportion of peat cover (Table 1), it is a globally important resource.

Table 1. Peatland occurrence in selected countries (International Mire Conservation Group, Global Peatland Database, 2010).

Country	Peatland area km^2	Global Ranking	% Land area	Global ranking
UK	17,113	18	9.5	22
Falklands	11,408	26	93.7	11
Ireland	11,090	27	15.8	13
Chile	10,996	28	-	-

The estimated carbon stocks (m ton C) of the Falklands in 2008 was 1151, compared to 1745 for UK and 1130 for Ireland (Joosten, 2010).

Table 2. CO_2 emissions from degraded peatlands (1990 status) – Falkland Islands (Joosten, 2010)

Total Area	12,173 km^2
Peatland Area	11,500km^2
Peat Carbon Stock	11,150MtC
Total emissions	1.1 Mt/C/yr

(iv) Use for fuel

The first settlers on the islands, a small French colony in 1764, record using peat for fuel (Pernety, 1769). Governor Moody imported a peat stove in 1842-the first record of a stove for burning peat in the islands (Dickson *et al*., 2001). Subsequent locations for farm settlements around the islands were based on the availability of peat for cutting (Miller, 2006). One of the reasons for choosing to move the small settlement from Port Louis to Stanley in 1843 was because it was thought there was about 100 years of peat on the common land at the south of the harbour. Each house in Stanley was issued a peat bog from which they could cut peat for domestic use. All peat was cut by hand until the early 1950s (the Government used to employ hand peat cutters) when the Falkland Islands Company imported a peat-cutting machine from Ireland. The cutter was used for a few years but proved unsuccessful as the peat deposits in the Falklands were not of the raised bog type found in Ireland (Miller, 2006). Subsequently different machines were tried, the most successful being a "*McConnell Arm*" a back-mounted tractor attachment. There are no figures available for the amount of peat used for fuel locally (the 2012 Census records that only 4% of households now use peat to heat their properties – a decline of almost 90% since 1991) but it must be noted that no peat was ever exported and the

population of the islands has never exceeded 3,000 people. For most of their history, it has been much lower than that. Hence, the amount of peat extracted for fuel, while significant in some locations has been inconsequential given the dispersed and sparse network of small farm settlements. In 2001, the children of North Arm School record the settlement changing to diesel from peat-fuelled stoves in the late 1990s. This was because of the increasing distance from the settlement the workers had to travel for good peat, the cost of fuel and labour (Dickson *et al.*, 2001). Gradually, over the past fifty years, most homes and settlements increasingly used oil for fuel and since about the 1980s there has been a steady rise in the use of wind turbines for energy on farm settlements. The town of Stanley now generates over 40% of its electricity use from six wind turbines.

(iv) Ecosystem services provision

The peatlands in the Falklands deliver a clean water supply to the population, store an estimated 11,150 MtC (Table 2) and support most of the biodiversity associated with the islands.

There are 363 species recorded as growing wild in the Falkland Islands' vascular flora and listed in the checklist (Broughton & McAdam, 2005). Of these 178 species are native and 200 species non-native and naturalised (Broughton & McAdam, 2002c; Lewis, 2012; Upson, 2012a, b).

The Falkland Islands are currently considered to have fourteen endemic species. These are *Chevreulia lycopodiodes*, *Erigeron incertus*, *Gamochaeta antarctica*, *Hamadryas argentea*, *Leucheria suaveolens*, *Nassauvia falklandica*, *Nassauvia gaudichaudii*, *Nassauvia serpens*, *Nastanthus falklandicus*, *Phlebolobium maclovianum*, *Plantago moorei*, *Senecio litorali* and *Senecio vaginatus* and *Calceolaria fothergilli*.

As would be expected the native flora shows strong affinities with that of southern South America. Thirty-four species (19%) have a "*circum-Antarctic*" distribution occurring in some part of the sub-Antarctic zone, New Zealand or south-eastern Australia, and sixteen species (9%) have a bipolar distribution, being found also in higher latitudes of North America and to a slightly lesser extent, Europe (Moore, 1968). The juxtaposition of the islands between Antarctica, South America and often remote South Atlantic islands gives them high bio-geographic importance. Nationally, five threatened species are restricted to peatlands: *Alopecurus magallanicus*, *Carex banksii*, *Carex macloviana*, *Carex magellanica*, and *Carex sagei* (R. Upson, pers. comm.).

Threats to the Peatlands

(i) Reform of rural infrastructure.

Land reform in the 1980s has resulted in farm subdivision and increased stock numbers. In many cases, this has been accompanied by fencing, pasture improvement and greater stock control but overgrazing and erosion of some of the shallow, fertile soils has occurred. Agricultural research has greatly contributed to an understanding of the sustainable management of the rangeland vegetation (e.g. Kerr, 2003). Other rural development activities related to oil, fishing, aquaculture and tourism have had limited impact.

(ii) Plant introductions.

Introduced plant species will affect the peatland ecosystem to a greater or lesser extent. The total number of non-native species (200) exceeds the total for native taxa (178 species) (Broughton & McAdam, 2002c; Lewis, 2012; Upson, 2012). Taxa come from 46 families of which the Asteraceae (24 species and 12% of the non-native flora) and the Poaceae (30 species and 15% of the non-native flora) are undoubtedly the most important. Most non-native species, (174 taxa and 87% of the non-native flora), show an association with human habitation and other built environments. Of these approximately 18% are dependent upon such habitats, reflecting the requirement of many non-natives for open, disturbed or nutrient enriched ground. Other species associated with habitation are more widespread and can also be found in naturally open and disturbed habitats such as beaches and seabird colonies, or in vegetation that has been modified by domestic animals. However, the association of some species with habitation is equally a reflection of their horticultural and agricultural origins and some species, particularly the trees and shrubs, are merely relicts surviving where settlements and gardens have been abandoned.

Most non-native taxa were rare or local in occurrence and so probably do not have the competitive ability to spread far in the harsh environment of the Falklands peatlands (Broughton & McAdam, 2002c). As man's activities continue to expand and diversify in the Falkland Islands the non-native flora can also be expected to expand and to become more prominent. A similar trend has already been noted in Tierra del Fuego, where the increasing activity of man has undoubtedly extended the area of many non-native taxa (Moore, 1983). *Cirsium vulgare*, for example, arrived in Tierra del Fuego prior to 1917 but was not common for many years. During the 1960s, however, it became more widespread, particularly along roads.

(iii) Countryside access

Building a rural road network commenced in 1985, before then there were virtually no roads in the Falkland Islands. Now a sparse network of roads exists, giving more people from Stanley (the only town) access to the countryside. This, coupled with more leisure time, a greater interest in wildlife, and the growth of the tourism industry has put more pressure on coastal and other sensitive habitats. A road network allows weed species to expand their range. This has already happened with *Senecio sylvaticus* and *Cirsium vulgare* may follow the same expansion pattern as on Tierra del Fuego.

(iv) Fire

As vegetation emerges from the winter it has accumulated a high proportion of dead matter which creates a fire hazard, particularly in the dry windy spring and summer (McAdam, 1984b). The peat soils that dominate much of the landscape are also vulnerable to fire particularly following prolonged periods of dry weather or drought. It was common land management practice to burn pasture in spring to remove this dead material and to make the greener leaves below more available to sheep, but this practice is used less often nowadays. Repeated burning may have some detrimental effect on the flora but this is not clearly known. Fires can also occur through carelessness and from lightening strikes.

Figure 4: It has been common practice to burn some peatlands in spring

(v) Climate change.

On a more global scale, climatic change may have a significant effect on the ecosystems within the Islands (Bokhorst *et al.*, 2007; Sear *et al.*, 2001; Wadhams, 1993). There is evidence that summer rainfall is slowly declining and sunshine increasing (Hoppe & McAdam, 1998; McAdam & Upson, 2012) and there are periods when ozone depletion is particularly evident over the islands. A combination of these processes may well have a significant effect on the peatland ecosystem and this is currently being investigated (McAdam & Upson, 2013). A combination of these processes may well have a significant impact on the flora.

Figure 5: The thin layer of peat is vulnerable to erosion in many areas

Hence it can be concluded that, although relatively small in area, the Falkland Islands do constitute a significant and unique global peat source.

What has been the impact of the Falklands War (in 1982) on the peatland ecosystem?

The Falklands War

The Falklands War (1982) has been analysed in great depth both from a military, geopolitical, strategic and personal perspective. There is a huge volume of literature on the subject and while many of the (particular personal) accounts refer to the

effects of the terrain (peatlands in most cases) on combatants and their equipment, not one refers to the impact on the peatland ecosystem.

(i) The course of action

The War (technically it was a conflict as Britain and Argentina never actually declared war) insofar as it impacted on the Islands started on 2nd April 1982 when Argentine invading forces landed and, after a brief battle, captured the Islands capital, Stanley. The initial landing by Argentine special forces was very close to the capital at Port Harriet a few kilometres to the south east. Subsequently, Argentine heavy armament and vehicles landed on Cape Pembroke about 3km to the north east of Stanley and had only limited peatland to cover. The peat was dry, shallow and well disturbed anyway in this area so overall the initial landing had little environmental impact.

Subsequently the Argentine garrison was strengthened around the Islands at key coastal locations – Fox Bay, Port Howard, Pebble Island on West Falkland and Darwin/Goose Green on East Falkland as well as other locations. As there was no road network in the Islands, these garrisons were established by sea so there was little effect on the peatlands. Argentine forces commenced a programme of "digging in" around key locations to repel any land invasion but such "dugouts" and "fox holes" were largely hand dug and insignificant in area. Overall Argentine forces concentrated approximately 70% of their troops in defending Stanley so most disturbance was in an area already heavily disturbed. Minefields were established. The land battle on the Falklands commenced on 1st May and ended on 14th June so was for a relatively short period.

Most of the initial action was around Cape Pembroke Peninsula, an area already severely eroded and disturbed by human activity due to its proximity to Stanley (McAdam, 1981). On 1st May a Vulcan bomber dropped twenty-one 1,000lb bombs on the area and there were subsequent intensive Harrier aircraft raids. All this served to further damage an already eroded area. On 22nd May the main landing of British forces occurred – on the west side of East Falkland at San Carlos. This was the commencement of a land battle during which most damage to the peatlands occurred. There was limited land action around the bridgehead at San Carlos, and at Goose Green, and virtually none on west Falkland apart from a raid on the grass airstrip on Pebble Island.

Figure 6: Most initial damage was around the Cape Pembroke area.

From 9th May onwards, British warships were shelling the Falklands from up to 13 miles offshore. Their targets were usually Argentine positions in the hills immediately surrounding Stanley. These are rocky areas interspersed with grassy heath. This shelling continued intermittently for the next month. On 28th May the 2nd Battalion, the Parachute Regiment captured Goose Green after an intense land battle. The shallow peat around the battle site was little disturbed, a gorse hedge was set on fire but it was raining heavily during the battle and there was little fire spread. Over late May and early June many troops "yomped" across East Falkland, 3rd Battalion the Parachute Regiment arriving at Teal Inlet on 26th May. There were some smaller vehicles with the troops who marched across East Falkland, but much gear and heavy guns were transported by helicopter so the effect on the peat was minimal. There are substantial areas of deeper, wetter peat in the area around Teal Inlet, the Malo River etc.

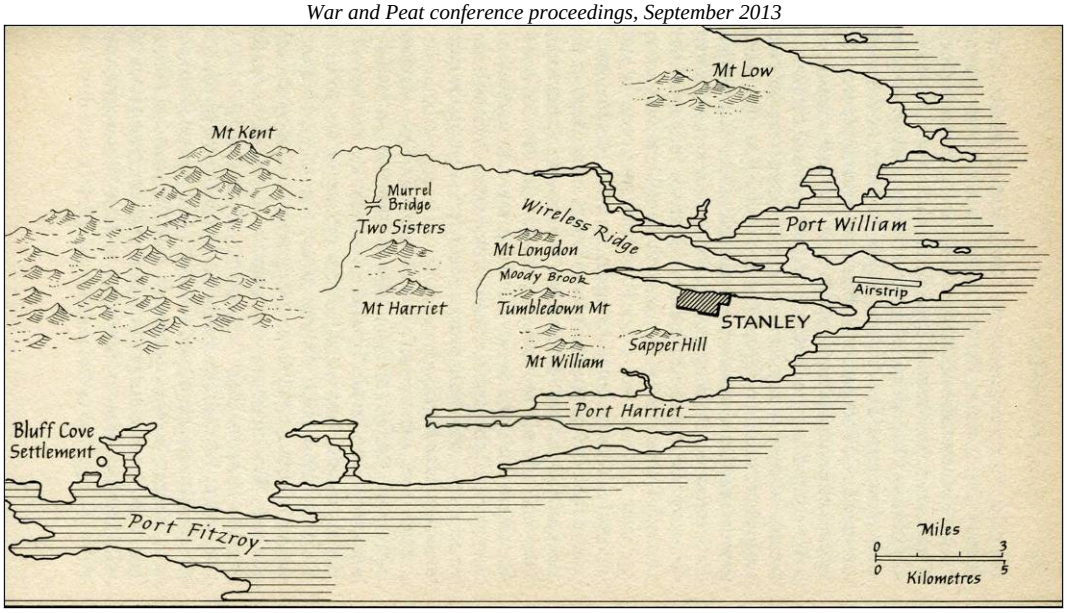

Figure 7: The area immediately west of Stanley, sites of most of the land battles.

From 10th June onwards the British were in command of high ground around Stanley and commenced an intensive 3-day fire period on the area with 105mm guns. This created further disturbance of the peatland in the area west of Stanley though much action and effort was directed to the quartzite ridges on the hills overlooking Stanley. Further naval bombardment of this area occurred immediately prior to the final attack (there are numerous accounts of all these actions by strategists and the men who fought in them. For an analytical time line see Cordesman & Wagner, 1990).

(ii) Timing of the war

Overall, the impact of the Falklands War on the peatland as an ecosystem was very limited. Deliberate fires to "rejuvenate" grasslands in the Falklands used to be common in the spring when the dry, strong winds and strong sun create much more inflammable conditions. These could be environmentally deleterious, particularly if the shallow peat became ignited. However, this was a "*Winter War*" (Bishop & Witherow, 1982) and while it was an average winter, the peat is at its wettest, the vegetation damp, and the winds moist, and the risk of fire minimised.

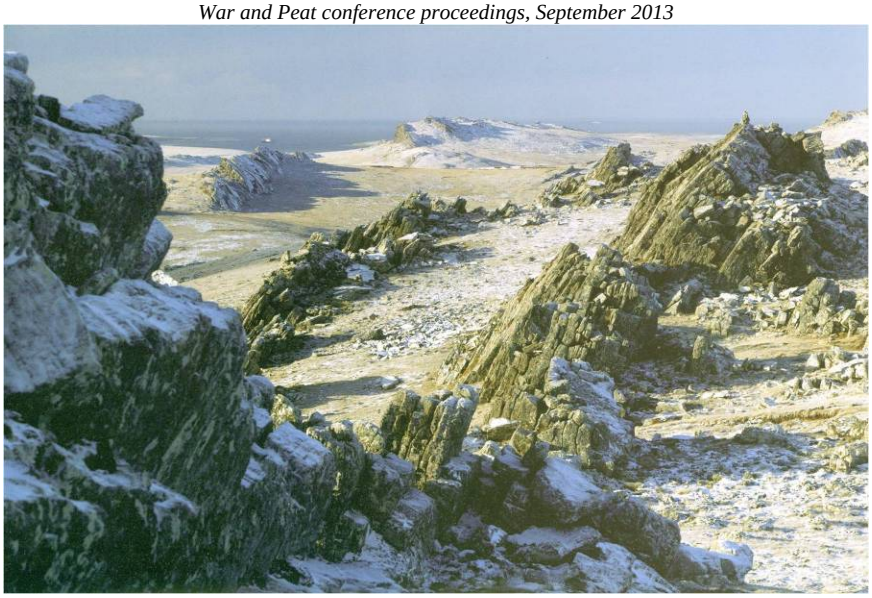

Figure 8: The "Winter War "so damage from fire was minimal. Mount Longdon –typical of the quartzite ridges which saw the fiercest action. (Photograph. Julian Thompson)

No major peat or vegetation fires occurred as a direct result of the action. The time involved in actual on-the-ground fighting was relatively short so had little lasting effect.

Figure 9: Argentine helicopter completely burnt out in 1982. This photograph, taken in 1983, shows that the fire damage to peatland had been minimal.

(iii) Logistics

Driving across the Falklands' countryside in winter was a skilled operation requiring the correct weight of vehicle, appropriate tyres and a knowledge of ground terrain – none of which either sides' forces had in great amount. Neither side was adequately equipped for the peatland conditions found in the islands so there was little heavy vehicle incursion, particularly into wetter areas. The most versatile cross-country vehicles the British had were tracked versions of the Combat Vehicle Reconnaissance (CVR) fast flexible gun platforms –the Scorpion and Scimitar. Due to doubts about their suitability for the islands terrain, only 4 of each were shipped down and deployed, mainly for ferrying supplies forward to advancing troops. In the end, the Argentine tanks and armoured vehicles played no part in the land battle so damage to the ground was minimal. Therefore, most of the fighting and technology involved lighter equipment or men on foot, both of which had minimal impact on the peatland. That is not to detract from the unpleasantness and misery of the conditions underfoot for those involved in the conflict.

Figure 10: Driving on the soft terrain can be hazardous. (Photograph: A. Moffat)

(iv) Impact on wildlife

The Falklands have no naturally occurring forests or woodland and most of the large numbers of seabirds, will have been at sea during the winter, only returning to the Falklands to breed in spring (Sept - Oct) by which times activity was long gone.

None of the ground traversed and disturbed could be classified as threatened or fragile habitat, particularly in winter.

(v) Minefield situation

From the start of the invasion, Argentine forces laid minefields on the islands to help protect them from invading British forces. Small areas of mines were laid around the major settlements at Port Howard, Fox Bay and Darwin but most were around Stanley, particularly on or above beaches where an attack was perceived. In most cases, these areas were well mapped and are still clearly marked permanently and reasonably securely fenced in the islands. The area of these known minefields totals about 1,300ha of peatland (0.1% of the land area). Although four minefields have been cleared since 2009, most have largely remained untouched since 1982.

Table 3 Minefield areas in the Falkland Islands (2002)

Land classified as "Dangerous"	1,314.9ha
Sub-classified as :-	
No landmines – change status	577.5ha
Mined areas – high hazard	57.5ha
Mined areas – Low hazard (7750m from settlement or 100m from road)	664.8ha
Cannot be cleared easily	17.9ha

It could be argued that they are an (albeit unwelcome) form of protection of peatland habitat as people and grazing animals are excluded and flora can get a chance to proliferate. Of more concern initially was the much larger area around Stanley where large amounts of dumped and/or unexploded ordnance existed and which initially posed a real threat to the public. While not excluding the public from such areas, there were very rigorous warnings and maps distributed to walkers and travellers in the countryside urging extreme caution and warning not to touch items found. Over a period of years, these areas have gradually been cleared of all but very minor risk and no attention is drawn to them anymore. In some ways, their presence did reduce the enthusiasm of locals and military personnel for leisure or unnecessary travel in the countryside for quite a few years after the conflict. This probably reduced the foot and vehicle pressure on the affected peatlands.

From a survey of feasibility of minefield clearance (Cranfield, 2007) the clearance of mines from all areas on the Islands currently classified as '*minefields*' or suspect areas is challenging but technically feasible. The clearance work will have some environmental impact however "*considering this in a timescale of many years of grazing and the likely future effects of climate change this will be minimal. Some environmental remediation will be required*".

Figure 11: One current minefield area showing the quartzite ridges where the final battles for Stanley were fought.

Post-war effect on the peatlands

(i) Farm development

Since the war, investment in the islands and farm subdivision because of an island-wide ownership transfer process has resulted in some redistribution of grazing pasture. Farms have been encouraged to reseed, albeit on a limited scale and sub-divide their large paddocks to exert greater grazing control. There has been more understanding of pasture dynamics to minimise the risk of overgrazing and erosion and there is less enthusiasm for burning the grasslands. The Falklands peatlands are relatively fragile though and extreme care will need to be taken in encouraging further pastoral intensification.

(ii) Peat cutting for fuel

There was a surge in peat cutting immediately after the conflict and the Falkland Islands Development Corporation funded the importation of a peat-cutting machine. This was used extensively for a few years mainly around Stanley and is still used but increasing prosperity has meant that bottled gas and fuel oil have taken over. Once again, the small population and localised use meant that this venture has had a very limited impact on the resource.

(iii) Travel and transport

The commencement of a rural road programme from 1985 further reduced the pressure to drive across peatlands and indeed their condition now is probably better than it was pre-conflict. Vehicle off-roading and motorcycle scrambling has become popular in the Islands since the conflict but it is very restricted in area given the low population density.

Figure 12: New roads have helped reduce the impact of vehicles on the peatlands.

(iv) Military activity

There are still military firing ranges in the hills. The area around Mount Pleasant Airfield is disturbed but there is also a perimeter fence, which excludes livestock from a substantial area of peatland

(v) Tourism

Increased awareness and involvement by landowners has resulted in a sustainable tourism, which has no significant negative effect. In the thirty-one years that have elapsed since the Falklands conflict, Islanders have always made "*veterans*" of the action and their families very welcome to the Falklands. In most cases, these people have wanted to visit the primary sites of the action and have had to traverse the peatlands. In some cases, access to the sites is a problem and more hard-surface track provision would help reduce the damage to the peatlands. Many

soldiers/relatives return to mount plaques or leave mementoes to recall their experiences or to honour fallen comrades. All of these events, while each minor in their own way are extremely important to people and, in a more diffuse way could be used to increase their appreciation of the landscape and peatlands of the Falkland Islands.

Figure 13: Soldiers of the Green Howards at Captain John Hamilton's grave, Port Howard, East Falkland, December 2012 (Photo: Andrew Roe).

Personal observations

The author worked in the Falkland Islands from 1975-1978 on a UK Government, Overseas Development Administration funded project to set up the first permanent agricultural research station on the islands. This gave him a chance to travel widely around the islands and observe the peat at first hand. He returned in 1983 in an agricultural consultancy and advisory capacity and has visited the islands almost every year since. Hence, he has been in an almost unique position to observe the state of the peatlands before and after the conflict. His overall observation is that the effects were minimal – for the reasons given above - with the only lasting legacy the minefields. There is a great awareness among the population of their countryside, an active local conservation organisation (Falklands Conservation) and an Environmental Officer in the Falkland Islands Government who are targeting resources from both without and within the islands to better understand the ecosystem services delivered by the peatlands and how best to sustain them.

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