

Military precision in the woods

For this 'Day in the Working Life', Carlyne Locher visited Catterick Garrison, a microcosm of the MOD estate: a central garrison (the largest garrison town in Europe), dry training area (infantry), live firing areas, tank circuit, and where Jez Kalkowski, the Defence Infrastructure Organisation's (DIO) senior forester, is based.

BULLET-POCKED hulks of tanks lie immobilised beside this deserted track. "The primary purpose of 80% of our woodlands is to provide training cover for the troops," says Jez, as we rumble on around the tank training circuit.

It was a passing reference made in a speech by Dr Thérèse Coffey that alerted this writer to the existence of a Ministry of Defence (MOD) head forester. "We hide our light under rather a small bushel," says Jez, "achieving nothing by going out and selling ourselves. I have heard veiled criticism of the MOD estate. We do a good job. Our industry partners do a good job. Other government departments do a good job. A lack of resources and budgetary constraints has actually pulled us all together."

At 1 April 2018, the Ministry of Defence owned 223,800 hectares of land and foreshore in the UK (either freehold or leasehold), including 18,000 hectares of woodlands, and held rights over a further 207,400 hectares. The estate is managed by the DIO, who have a remit to ensure the safety, sustainability and rationalisation of the estate.¹

Technically, any tree growing on MOD land, worldwide, be it plantations, designated conservation sites, urban amenity woodlands or individual veteran trees growing around barracks, is the responsibility of Jez and his team of three regional foresters. "As foresters, we manage our woodlands as if we were managing them for forestry, then overlay the military needs on top of that. Military activities within them are probably detrimental to the woodlands,



The dark green block of mature conifer provides a splash of colour on the landscape.

but that is what they are there for."

Hirsuite, and dressed in civvies, Jez is neither military man nor typical civil servant. He is open, direct and humorous. If this humour is deployed to further forestry's cause, when answering policy questions posed by Ministers, or in discussions with Defra and the Forestry Commission on ways in which MOD-owned land might be used for new woodland creation, as long as it fits within his brief of providing safe military training cover, it could be very effective.

Originally from Sheffield, Jez, 54, first studied art, followed by a degree in photography. His brief photographic career over after a particularly stressful and rain-soaked wedding, he sold his cameras, bought a chainsaw and went and chopped down trees in Scotland, and after, contracting across the UK.

A forestry course at Newton Rigg was



Left: Jez Kalkowski and Martin Robson, Training Area Marshall, standing with Martin's vehicle. On our way to meet Martin, we passed a 2-hectare area of scorched earth, the result of training damage. "We have quite a lot of fires," says Jez. Martin elaborates, "They train recruits in night fighting using Shamooli (mini) flares. I was called out at 8.30 and still watching it and putting it out at 1:45 am. The fire did not spread to the woods. We do have a big problem with gorse, so it will actually help when replanting in the autumn."

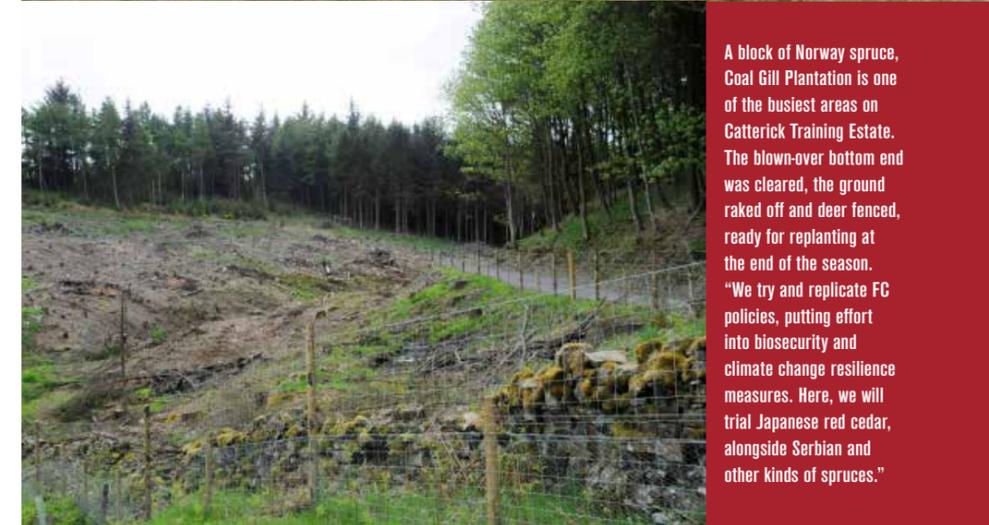
Below: 120 hectares of new woodland have been put in. The soil in these higher areas is not great but the trees are doing really well. In ten years, it will be a fantastic block away from the public gaze.



umbrella of 'Environmental Support and Compliance'. Jez spends 30% of his time in the office, 20% on the ground and 50% travelling the length and breadth of the country, visiting training estates with his regional foresters, often providing support on seemingly irresolvable issues: public anger at woodland felling (Home Counties) or for projects already five years in the planning (Scotland). He joins department 'dial-ins' (phone or video conferencing) to save travel time. He books out his own 'works vehicles' and arranges his own hotel accommodation. "The last time I stayed in a 'mess' they asked if I had come to fix the sinks."

While 95% of the forestry team's time is spent on UK matters, issues abroad include implementing management of young amenity trees (eucalyptus) in Cyprus and how to maintain mature (100+ years) trees around barracks in Germany and Belize.

With the primary objective of providing military training cover, the forestry department's secondary objective is to provide assurance that the woodlands are safe to train in. To ensure all training woodlands are health and safety compliant, Jez has implemented a new system of storing inspection data in a central database. "With two years' worth of data, we are seeing trends (such as water issues on specific sites) that must be addressed. The military change their training area usage patterns, unused sites coming in for frequent use. Troops show us when they want to use different woodland, they just start accessing them. We are learning to be flexible and to



A block of Norway spruce, Coal Gill Plantation is one of the busiest areas on Catterick Training Estate. The blown-over bottom end was cleared, the ground raked off and deer fenced, ready for replanting at the end of the season. "We try and replicate FC policies, putting effort into biosecurity and climate change resilience measures. Here, we will trial Japanese red cedar, alongside Serbian and other kinds of spruces."

adapt inspections accordingly."

Right in the middle of the tank circuit, a young tube-bound broadleaf (with a small conifer element) woodland replaces 60 hectares lost overnight in 2005. "With partners the Woodland Trust, we have put in 120 hectares of new woodland. They lease the land, access FC grants and return the woods to us when the grant scheme runs out. The soil in these higher areas is not great but the trees are doing well. In ten years, it will be a fantastic block away from the public gaze. It is a much better use of the ground to have these trees. It is a fantastic partnership outside DIO management processes. We hope to do more."

Eight years ago, the MOD completed an inventory of their landed estate, "identifying

the further need for more woodlands," possibly accommodating trees on a further tenth of the land. "Both Defra and the FC have enquired about new woodland creation on the MOD estate, which is actually shrinking. If the land is not used, the MOD gets rid of it. Additionally, land may be good for trees but not necessarily good for training. While I firmly support planting and there is potential, the military requirement must be the foremost reason as to why that woodland goes in the ground."

The MOD does not mind what tree species or silvicultural systems are employed, if training woodlands provide cover. "60% of our woods are conifer. During the 1960s, as with commercial forestry, the military planted big blocks of Sitka spruce



Right: New planting within the tank training circuit and block of conifer in the distance. At Otterburn Training Area, removing a 20-hectare block of quality spruce in the National Park is an opportunity to double the woodland's size. "There is a military need for it, but we can't ride roughshod over the tenant farmers. Without the resources to take this forward ourselves, we could ask the farmers to plant the trees themselves. I would really like to second someone from the FC to work with us and move this forward."

Left: If a block is thinned, a dense edge must be left to ensure there is no visibility into and through the wood.



wherever they wanted, representing arboreal European landscapes which – during the Cold War – is where they thought the fighting would be. Some moorland areas are bleak old holes. For a trainee soldier, sitting in a bivvy bag for two weeks on an exercise, you don't want to be in oak woodland without a single leaf on a tree, you want something you can hide in. Conifer gives year-round cover. Management-wise, we squeeze as much life out of the plantations as we can. When they start to blow over, we clear as much as we can. When they become unsafe, we clearfell, replanting conifer on more suitable sites."

Quarry Plantation's land was ploughed, with larch and Scots pine planted directly into deep furrows. Wind blow and desiccated branches litter the floor. Unthinned and over-mature (in forestry terms), it should have been felled years ago.

"Troops actually like windblown areas. They are similar to woodlands hit by artillery fire or flattened in aerial campaigns, and are used for training engineers in how to use chainsaws." Regularly health and safety checked by industry partners, post-felling, this area will receive the Rolls Royce of ground preparation treatments, removing the ruts (a nightmare for night exercises) and ensuring stumps are cut as low to the ground as possible.

At quarterly Head Office meetings at Westdown Camp in Wiltshire, Jez updates colleagues on the management activities he has authorised Landmarc to carry out nationwide, detailing revenues coming in and what harvesting is due. "Currently, we are averaging 40,000–50,000 tonnes of timber a year across the UK. It is usually sold standing to the likes of Tilhill and goes into the timber supply chain. While we have quite a healthy budget with timber sales, I still have to educate people that 80% of our income is spent on replanting because of felling licences (government departments



cannot claim grants from one another)."

Timber values are a nice sideline. The real value is in the features and facilities they provide, which command the equivalent of millions of pounds in bookable training days. "These woods are a bookable feature, like a rifle range or an assault course." Service personnel organising training for their units will "book three woodlands on Area A for a Section Attack exercise."

Five years ago, this part of 4-hectare Sourmoor Plantation was opened and marketed to the military for training use. "This was a straight block of spruce. We got in and thinned, leaving brash for cover, before it got too old and the trees blew over. Forestry-wise, the trees are not in good form, but look how many troops are in here. This shows the value of the woodland in its own right. It is my work on the ground. I have friends that are soldiers; I am not a 'wannabe' soldier – I am an arty-farty tattooed hippy, but the fact is, I am proud of what I can deliver, forestry doing its bit."

Above: Gurkhas utilising logs and brash to build shelters, their home during a week of trainee exercises. Building simulates digging, which is banned.

Sure enough, Gurkhas wearing grass-topped helmets to break up the silhouette, and multi-terrain pattern camouflage uniforms slice thinned conifer limbs and branches (cutting down trees is banned) with their distinctive knives (kukri) to build shelters, their homes during a week-long training exercise.

Training Area Marshall Martin Robson is waiting for us beside a deer-fenced P2008 plantation, part of Sourmoor. Irregularly spaced mixed broadleaves encompassing a duck pond and owl boxes replace a uniform spruce block that blew over. Martin ensures that Catterick's training landscape, including woodlands, is 'bookable' and that trainees adhere to site rules. Beside signs stating 'Young Plantation: Keep Out!',



Above: A mixed block last thinned 15 years ago.

indentations along the fence top indicate otherwise.

This plantation has everything a platoon of trainee troops requires: pre-built access tracks; hardstanding vehicle bays (vehicles sink into the peat overnight); Portaloo bases (no one wants to walk in another's waste). He says, "For health and safety, a team with chainsaws (industry partners) will cut the lower limbs up to head height. We don't want soldiers getting whacked in the face during night manoeuvres." When completed, the fencing will come down. Martin thinks that this area could easily provide cover for a battalion (1,500 people). Soldiers travel throughout the world and Jez works with the FC and the military to ensure biosecurity measures are followed.

"Following a massive outbreak of *Phytophthora* at Sennybridge Training Area in South Wales we have felled the last of 100 hectares of larch. We have *Chalara* in an SSSI ash and hazel woodland at Catterick. *Phytophthora* would be disastrous. Half the woods would go. The military is working to ensure nothing is brought back in kits. We have been around the training estates, educating people on tree health and health and safety. They are our eyes and ears on the ground, reporting any problems to our help desk – a phone line maintained by industry partners, which works well. With time and resources, I would give quarterly briefings to Regional Commanders on what is happening in the industry. But we are all busy, so we stick to the main priorities."

When educating others, diplomacy is crucial. "Military people can be scary. If I am called into a 'situation' it is because something has gone supernova. Landscape

changes on the training estate, clearfell sites looking awful. I spend a lot of time explaining to irate Commandants why we are doing it, saying that in two years it will be perfect." For his own learning, Jez attends ICF meetings.

That the forestry department makes money gives them more freedom than some. "I am dealing with commercialisation of the estate at the moment, with planting, ensuring that managers in thirty years' time will benefit as we are now. We will not always be producing at this level, but the ideal is that one day the MOD forestry department becomes self-sustaining, with ring-fenced budgets to ensure the best for our future." Getting long-term forestry plans in place, five years detail, ten years outline, specifically linked to client objectives (training need) is nearly complete.

From mature conifer to young mixed broadleaf plantations, we finally walk through a mixed block, last thinned 15 years ago. A mature canopy of Scots pine and spruce, an understorey of broadleaves and conifers (some underplanting and much natural regeneration) is the closest Catterick has to CCF. "It is sustainable and what we want to aim for. I absolutely love it."

Jez also loves the variety of his role. "In theory, I could go anywhere in the world; there is a genuine reason to do that." Instead, he has a policy 'dial-in' with Ecology and Archaeology tomorrow. Next week includes a Regional Forester appraisal at Otterburn, updating landowners on MOD estate happenings in Cumbria and reviewing geological surveys in Scotland. "In actuality, if you wanted to sum up a day in my working life – take a picture of my car filled with empty bottles of water, banana peel and crisp packets."

¹ Statistics: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/714784/20180607-LandHoldings.pdf