NARRATOR
This is one of the few places of unspoilt nature in the United Kingdom. An area with pockets of perfectly-preserved terrain and teeming ecosystems.

Where is this relic of a pre-factory age countryside?

The answer is surprising. It’s the military’s tank firing range. In the south of England, in Dorset, the Lulworth Gunnery School is in fact one of the many military areas that are unintended sanctuaries for Britain’s endangered species, such as this slowworm for example.

The silver-studded blue butterfly or this smooth snake – all considered endangered or vulnerable in the UK today. Britain’s Ministry of Defence owns some 240,000 hectares of training ground, land which hasn’t been farmed on or built on for centuries. Though weapons of destruction are common, these tanks, machine guns and exploding shells at Lulworth haven’t had a detrimental effect on the environment.

The animals are relatively oblivious.

This certainly hasn’t gone unnoticed by the MoD.

Major Nick Burgess and Colonel James Baker are two of the MoD employees dedicated to the conservation of Defence Estate land.

Major Nick Burgess, Ministry of Defence, UK
Come on butterfly.

If you just look down there, that’s amazing.

NARRATOR
Here at Lulworth, Range Officer Major Burgess is supported by the head of MoD conservation, Colonel Baker, in looking after 2,989 hectares of nearly unspoilt nature reserve. Together, they must ensure that the training of the soldiers and the protection of the environment are both getting attention.

Finding the right balance is not always an easy task. To ensure the land is properly looked after, Major Burgess relies on a team of amateur and professional conservationists to keep their eye on Lulworth’s land.

Bryan Edwards. Conservation Committee
I joined the Conservation Committee in 1984. Since that time I’ve been walking around and recording the different plant species and also recording the different vegetation types which are found on the ranges, and it’s such a fantastic area, such a diverse area.

As you go from the coastal cliffs through to the, to the mires on the heathland it’s such a range of habitats that’s really largely been untouched by modern agriculture, so you know, you’re in a little sort of time zone down in here, you know, so it is an amazing place and every time I come down here I sort of find new species.

Oh, smooth snake.
For each of the rare species I do a sketch map of where it occurs, what type of habitat it’s growing in, it’s just to keep a record of where it is and also to let Dean know where it’s growing and if they can do any, any management to encourage it.

This is *lemonium didataformia*, a species of rock sea lavender, which is a very rare species globally, confined to the Dorset coast where it grows on the clifftops and the faces of the chalk cliffs, and then also there’s another colony down on the Chessell Beach, but that’s about it, really, nowhere else in the world at all.

This is bog hare grass, which is a nationally scarce species confined to wet, acid soils on heathland, but it is quite vulnerable being right next to the tank run there, hence the fenceposts and the sign. This a little patch here is probably 75% of the Dorset population, so it’s quite important.

**NARRATOR**
Since Brian began surveying at Lulworth, he has spent hundreds of hours cataloguing thousands of species.

**Bryan Edwards**
In many ways I think an ecosystem or a woodland or a grass on which has many different species of flowers and insects and birds and whatever, indicates certain health of the planet itself, so if these things start dying out there is, there is something wrong.

**NARRATOR**
To prevent the destruction of wildlife and habitats in the UK, organisations such as WWF have dedicated themselves to fighting for them.

**Robert Napier, WWF**
UK wildlife is facing a crisis.

It’s facing a crisis because the habitats where that wildlife lives is being destroyed.

In recent times we’ve destroyed 97% of rich wildlife grassland. We’ve destroyed 80% of heathland. If you destroy these habitats, the wildlife have got nowhere to go, and surprise, surprise, they start to die out. We lose species.

**Bryan Edwards**
Particularly if we’re talking about sort of bird and insect species, I mean there is a balance there, so if you take out a predator then there will be an explosion of the population of one, let’s say one particular insect and that could eat particular plant species, so there’ll be a knock-on effect, so if you’re taking one part of the sort of, the puzzle out, then you can upset other whole sort of ecosystems.

**NARRATOR**
According to WWF, 134 species of plants and animals have become extinct in the UK this century. 300 British government sites of special scientific interest are destroyed or damaged every year. Increasing prosperity and lifestyle changes have driven the urban sprawl. That’s why a gunnery school can also be a refuge.

Lulworth is home to one of the most thriving populations of seeker and roe deer in the UK.
Terry Cooper:
How’s your zoom? Now if you wanted to get a good shot of these, you could actually get in the back with the dogs.

NARRATOR
Major Terry Cooper is Lulworth’s Principal Deer Manager, something his army training has well prepared him for.

Terry Cooper
Go for a walk now. The wind’s right, the sun’s right, let’s hope the deer are there. We’re all MoD employees and we do this on a volunteer basis. We have a group on this particular area looking after 600 plus deer. They all go through a training system. At the end of that period I can safely say that we’ve got very experienced, semi-professional deer stalkers. This is a bit better for you.

I think they’ve actually seen our cameraman.

Okay, what you’ve got there is a small group of hinds and stags, just moving up there. You know, it’s so difficult to actually get near these herds at this time of the year because of course they’ve got smaller young with them.

They like acid soils, they like the cover, they like the wet ground and they can put up with vehicles and they can put up with gunfire, but they, they don’t like human disturbance, which now that group’s settled down, they’re all feeding out there, they’ve had their little bit of human disturbance for the day but generally you know this is fantastic habitat for them.

The farming methods nowadays, you know, there’s hardly any ground that’s left with an edible crop on it. During the winter months it’s all been ploughed up. The metabolism of the deer changes as well and they need a different type of food, and I think once again, you know, we have it here. They need the rough grazing that we have here on the MoD ranges. This area is, is seeker country. This is downtown seeker land, they just love it here, and that’s why we’re kept so busy. 26, 27, 28, 29, 30, 34, 35, 36.

Strange people that we are, we spend most of our lives sat out here under hedges, or trees like this, watching the sun go down. Not a bad life, I suppose. Not a bad hobby.

Bryan Edwards
MoD are a huge landowner and really those species have survived more or less by accident in a way, I mean that’s a great thing.

They didn’t intend to save all these things, but they have, you know, by owning such large areas and keeping the public out, keeping disturbance low and not intensively farming their land.

I mean that’s been the key thing.

NARRATOR
The soldiers at Lulworth train nearly all the year round. During training, the estate is marked as a danger area with red lights or flags to warn against the exploding shells and firing practices. Crucially, this means the public are kept away, although after hours they do make one or two exceptions.
Colonel Evelyn Prendergast is Lulworth’s reigning odonotist, more commonly known as the dragonfly man.

Colonel Evelyn Prendergast
I think we’ve got it this time. You see that is a nationally scarce species actually, a small red damsel fly. And they live on heathland like this. Weren’t you lucky, the first one you’ve seen is a scarce one.

Now let’s see if we can find something blue to go with the red.

NARRATOR
Lulworth has an exceptional dragonfly population, but it wasn’t always so.

Military practices have not only made Lulworth a safe haven for these creatures, but they’ve often promoted the growth and survival of Lulworth’s natural world through its own destructive practices. Heath fires started by exploding shells brought unexpected benefits.

Colonel Evelyn Prendergast
Three years ago, four years ago, all that area you see there went up in flames one afternoon, and it went quite out of control, but when they got the sort of fire engines out, to put it out, they found there was absolutely no water at all, so with the Range Officer we designed a new pond there which is readily accessible to any fire engines coming along, where they can fill up their tanks if they have another fire, and it also happens to be nice and sheltered, so dragonflies will probably appreciate it too. Shall we go down and have a look in it?

Well we made a total of 14 altogether, and they were made partly by using some dangerous explosives which had to be blown up anyway, and the whole thing went bang and made these bigger pools down below, and they’ve been a great success as far as dragonflies are concerned, because it does give you open water amongst all the acid bog, where there was none before.

Just purely coincidental.

They are interesting dragonflies and on some occasions I come here I may see 20 or 30 just flying around, and as I say, they’re endangered by quite common here, thanks we believe largely to the work that we’ve done on this land. Oh, you’re looking at me, I’m told you’re supposed to be looking at it.

This is what’s known as the common blue damsel fly and it’s very similar to the azure damsel fly, the main difference being that little, tiny little mark on the second segment there, and the exact pattern down on this end. The, the blue is different than the other one. In fact if you hold a damsel fly like that by its wings, it doesn’t do it any harm at all. On a good day you might see 50, 100 or more and just going round the pond, either flying around by themselves, looking for mates or actually paired up together or laying their eggs.

Can you see that mating pair there? You see that she brings up her back end onto his chest and so they mate like that with, in a circle, and then when they finish that, they very often fly off together, but it takes two to do that.

Bryan Edwards
This area’s been put forward as a special area of conservation under the European Habitats Directive, and also is very, very wet.

Really the key plant here is this bog moss. It really acts as a sponge and sort of holds the water and then it supports all these wonderful things like carnivorous sundews there, which has sort of glue on the end of these hairs on the leaves, and then the leaf curls up and the plant digests the insect to get more nutrients, because basically it has to get other food to survive.

Colonel Evelyn Prendergast
Pond life, its fate, in fact that was the one we were looking for, that was the azure. Very sad. Go and sit on a lovely flower and what does it do? Sucks your blood.

You can’t blame it. All the sundew was doing was doing what nature provided it for, the way it gets its food is just like that, so-

Ha-ha. We haven’t got any dragonfly larva but we’ve got some newts and beetles. This is part of the fun when you dig into a pond like that. You never know what you’re going to get out. Now if we’d been looking for newts and beetles we’d have found lots of larva, I’m sure. Have another shot. I’ll see if I can do it without falling in the pond. There it is just on the edge. In amongst all the newts and everything we’ve found a dragonfly larva there. Can you see in here? Ugly-looking brute, and you see that’s the sort of thing that emerges from the water, climbs up onto a reed or something like that, splits along the back there and slowly emerges out of the skin to become a beautiful damselfly or dragonfly in this case. It’s quite a remarkable transformation. Can I go please now?

Bryan Edwards
In England we have a long history of amateur ecology, if you like, actually recording things, collecting things and writing floras, so there is a long history in this country and I think it’s, we have to preserve that and we have to encourage our, our children and grandchildren to become interested so that we preserve all these you know, beautiful plants and animals and habitats for the future. I think it is very, very important.

NARRATOR
On the east side of the range, Steve Hale and his wife Maureen look after Lulworth’s colony of sand martens, who return each year after an exhausting flight from Africa.

Steve Hale
I’ve been here on the ranges from what, ’95 I started.

It takes about two or three years to get a licence on your own. A lot of, an awful lot of commitment. Very unsocial hours and very early mornings, very late nights. The chap that trained me for ringing was my predecessor on the ranges, so when he retired I jumped into his shoes, and it’s been very good. It’s got better ever since. It’s got better.

I first started ringing because I got a little bit fed up with the way birdwatching was going some years ago and sort of the twitching element, that get long lists of rare birds, and I didn’t really want to be associated with that, so I moved into more sort of local hatch work birdwatching in the underhill areas, and the ringing side of it was a nice spin-off because it puts a scientific input on the birds you’re looking at. So the work we’re doing here is all helping hopefully the work of what’s going the work on what’s where, and the ringers across the country with other projects, all the data
can be put together on a countrywide basis to see if there’s any difference in southern latitudes to northern latitudes or what’s going on. So it’s a very exciting scheme. Can you pick it up, they’ve both got rings on. The main point of the study is to get those coming back from the previous year. I’ve got birds here this year which are four or five years old, which is quite encouraging. It’s like finding an old friend turn up. So that’s what the study’s all about, the survival of adult birds. Rather than keep on ringing new birds, we go for the old birds, see if they make it back from Africa.

Here’s another female, brood patch, the males will develop a small brood patch so you have to be a little careful, which is why I say this has got a good brood patch, or a small one. It’s an adult, ring number E158303. The address is the British Museum, London SW7. The British Museum kindly allow their address to be used because it can fit on the ring and everybody knows of the British Museum in London, so it’s quite a useful, useful address. Wing 117 millimetres. On the ranges I’m only really doing sand martens now, because the emphasis on special studies and just random really, fabulous but I enjoy the study of the sand marten more than anything else. Because they’re small and pleasant, and they don’t bite. They don’t bite. The sand marten is not yet on the red list, but the population’s declined probably 52% last five or six years, so it’s giving some concern. 14.2 grams. Amazing little birds.

NARRATOR
The UK military is far from being alone.

Throughout the world, training ranges double as wildlife sanctuaries – a sign of how badly civilians are doing in safeguarding nature. And so organisations such as WWF are calling upon everyone to campaign for stronger wildlife protection.

Robert Napier
There is hope. It’s still within our control, there’s action we can take that will reverse or at least stop the decline, and that’s within our grasp. It’s for people like WWF to be getting the message out there that we can do better, and let’s learn from the tragic lessons of the past to ensure that we do provide a living countryside for our children and our grandchildren.

Bryan Edwards
I mean it sounds silly but in a way could you imagine a world without birdsong?

Or without trees or without butterflies or whatever, I mean could you actually imagine it?

I mean I think that’s just, it’s just as simple as that, to me.

NARRATOR
The irony is that amongst the deadliest weapons in a landscape of destruction, a kind of hope has been created. In the future perhaps we can restore a living, working countryside. For now, nature’s army will continue to help defend Britain’s wildlife.