

ANNALS OF NATURE

BETTING THE FARM

The obsessions of Jake Fiennes could change how Britain uses its land.

BY SAM KNIGHT

O ne day last summer, Jake Fiennes was lost in a cloud of butterflies. He was on a woodland path near Holkham Beach, on the north coast of Norfolk. Every decade or so, ten million painted-lady butterflies, which are orange, black, and white, migrate to Britain from tropical Africa. The hot summer meant that it was a bumper year for native species, too, and the painted ladies mingled with red admirals, peacocks, and common blues, feeding on bushes set back a few yards from the path. "Just sat in a haze of flittering, fluttering butterflies," Fiennes told me later. "I was in awe. These flowers were just exploding."

Two friends of mine happened to be passing at that moment. They saw a figure in the swirl. Fiennes, who is forty-nine, has bright-blue eyes and a shaved head, except for an irregular flap of white hair, which is jagged with gray. He is an arresting presence, with an abrupt, avid way of speaking. He combines the correct jargon of the English countryside-hedges are flailed, ditches are grubbed, the grass is the sward—with a lot of swearing. He starts sentences in the middle. He began to talk to my friends, at them, about the painted ladies, about how they floated on gusts from the Atlas Mountains; how if you looked closely enough you could see

"How do we feed the nine billion?" Fiennes said. "Through functioning ecosystems."

the faded wings of the older creatures and how they got tired flying over the sea, and sometimes rested, like a settling of dusty stars, on fishing boats in the English Channel. My friends stood and gawped for a while. Then they carried on, leaving the butterfly man behind.

Fiennes is the conservation manager of the Holkham Estate, one of Britains most important private landholdings The estate covers about twenty-fire thousand acres and includes a nature reserve, which is visited by almost a malion people a year, and a farming business that grows potatoes, sugar beets and barley, for beer. In 2018, Fiennes was hired by Holkham's principal landowner, the eighth Earl of Leicester. bolster wildlife across the estate, from its intensively farmed arable land to wetland bird habitats. Fiennes describes what he does as "multifunctional farming" or "environmental farming." He believes that farmers in the twenty-fire century must cultivate as much as the can on their land-fungi for the sol grasses for the pollinators, weeds for the insects, insects for the birds, pasture for the livestock-for the long-term goal of carbon capture and food production "How do we feed the nine billion" Fiennes said. "We feed them through functioning ecosystems."

Fiennes has spent his adult life 🚞 British farming, but he is not quite of it He is the twin brother of the actor Joseph Fiennes, and one of six siblings one of Britain's best-known bohemiar families-the Twisleton-Wykeham-Fiennes, who choose to simplify them surname. (Jake's eldest brother is Ralph his sisters, Sophie and Martha, are filmmakers; his third brother, Magnus, is a music producer, based in Los Angeles Ranulph Fiennes, the polar explorer a cousin.) Fiennes is profoundly dysletic and almost entirely self-taught. Last year he was an adviser to Britain's first major review of its national parks since 194which was chaired by Julian Glover. journalist and a former speechwriter for David Cameron. "There's an element of Jake which looks like he could have take up farming or heroin," Glover told me "There's no one else quite like him."

Fiennes lives in an old blacksmiths house with his partner, Barbara Linsle an agricultural historian, in the village of Burnham Thorpe, a few miles from

Holkham. On the wall above his stairs are the heads and antlers of Britain's six deer species, which Fiennes has shot and eaten. On a beautiful afternoon last September, Fiennes drove me from his house to the grounds of Holkham Hall, which was built by the Coke family, who were ennobled as the Earls of Leicester by King George II, in 1744. (The name is pronounced "Cook.") Fiennes turned his Ford Ranger to face the gates and the arrow-straight drive leading into the park, and rolled a black cigarette. "This is the front door of Holkham," he said. "This is Coke of Norfolk saying, 'This is how big my cock is.""

Holkham was one of the birthplaces of the agricultural revolution. At the beginning of the nineteenth century, the estate, which included some seventy farms, set new standards for food production, instituting regular four-course crop rotations, long-term leases, systematic breeding programs, and the use of cover crops, such as clover, which fix nitrogen in the soil. Though many of these techniques originated earlier, they were publicized to great effect by Thomas William Coke, a prominent politician. Coke of Norfolk, as he was known, staged annual sheep shearings that drew hundreds of landowners to the estate. In July, 1820, Prince Potemkin of Russia, along with visitors from Baltimore and Paris, learned about Arabian sheep, tricks to stop mice from eating cornstalks, and the correct direction for drilling seeds (north to south). The "Norfolk rotation" was replicated across Britain's lowland farms and increased food production, liberating workers from the land to take their chances in the mines and factories of the industrial revolution.

When Coke died, in 1842, a stone column with a wheat sheaf on top was erected at Holkham. Fiennes drove his truck across the grass to show it to me. The pedestal is decorated with sculptures of sheep, seed drills, and sayings apposite for our frightening ecological age. "What I love is this," Fiennes said, pointing at an inscription below a plow. It read "Live and Let Live."

Fiennes told me to close my eyes. The monument stands in a corner of Jane Austen-style parkland, a dreamlike England. "What can you hear?" Fiennes asked. I was struck by the silence. After a moment, I could make out the small sound of a couple of birds, singing in the distance. "Generally, not a lot," he said. During Fiennes's lifetime, Britain has lost about forty-four million breeding birds. "This has become a natural, day-to-day thing that is not there," Fiennes said. "This is what it is."

The United Kingdom is a farmed country. Almost seventy-five per cent of the land is given over to agriculturecompared with some forty-five per cent in the United States. After the privations of the Second World War, the country joined a continent-wide push to banish hunger from Europe, Between 1935 and 1998, aided by chemicals, subsidies, heavy machinery, and crop science, British farmers more or less tripled their per-acre yields of wheat, oats, and barley. Milk production doubled. The amount of chicken meat offered for sale increased by a factor of twenty-five. Traditional farming methods, such as the Norfolk rotation, fell away.

Many seminatural habitats were drained or plowed under. An estimated ninety-seven per cent of hay meadows were lost. Between 1990 and 2010, the area of crops treated with pesticides in the U.K. increased by fifty per cent. The environmental damage caused by Britain's intensive agriculture has only recently been properly understood. In 2013, twenty-five nature organizations published the first "State of Nature" report. "Even the most casual of observers may have noticed that all is not well," Sir David Attenborough wrote in the foreword.

Researchers studied more than three thousand species and found that sixty per cent were in decline. Modern farming has been a nightmare for the familiar creatures-mole, rat, toad, and badger-of the British landscape. The 2019 "State of Nature" report concluded, "Farmland birds have declined more severely than birds in any other habitat." More than half have disappeared in the past fifty years. We have one turtledove where we used to have ten. Sixty-eight per cent of starlings have gone, along with a quarter of our moths. In 2014, scientists found that lots in the city of Leicester contained a third more organic carbon-a standard measure of soil fertility-than the surrounding farmland.

As we drove away from Coke's monument, Fiennes stopped his truck. In

front of us was Holkham Hall, a Palladian-style, sand-colored stately home, which is thought to have about a hundred and fifty rooms. The seventh Earl used to migrate through the house according to the seasons. A few tourists were wandering around. "Look at the sward," Fiennes said. He had opened the truck's door and was staring down at the immaculate, even lawn. "What's in it? It's shit. There's nothing in it. It's shit, poor grass." A pair of fallow deer were watching us. "The perception is 'Wow! This is amazing,'" Fiennes said. "But actually I've got farmed deer, I've got trees dying, and I've got a sward that has not even got clover in it. It's not even got plantain." Plantain is a staple of British meadows and grasslands. "It's got nothing," Fiennes said. "Because at some stage this sward has been improved." He sat quietly. "I would love to know what this would have been like a hundred years ago."

For ecological and political reasons, British farming has reached a turning point. When the country became part of the European Economic Community, the forerunner of the European Union, it joined the bloc's Common Agricultural Policy, one of the world's largest farm-subsidy programs. The C.A.P. consumes sixty-five billion dollars a year, about forty per cent of the E.U.'s budget; for decades, it has been criticized for its perverse incentives and environmental impact. In 2016, the C.A.P. was among the bureaucratic monstrosities of the E.U. that helped drive the vote for Brexit. Leaving the bloc has led to the first reform of agricultural policy in almost fifty years. "It is a reset moment," Minette Batters, the leader of the National Farmers Union, told me. Beginning next year, British farming will transition to a new system of support, which will be linked to "public goods," such as water quality and biodiversity. "We're reinventing quite a lot of things at once," Tony Juniper, the chair of Natural England, a public conservation body, said. "It does feel up for grabs."

In a fluid moment, Fiennes's ideas have attracted national attention. Juniper described Fiennes as "one of the motive forces behind this new way of looking at the land." Geoff Sansome, the head of agriculture at Natural England, has worked with Fiennes for more than a decade. "Jake's current canvas is Holkham, but he's got his eyes set on a bigger canvas, quite honestly," Sansome said. "He's on a mission."

Fiennes sees what he does as obvious. "Sometimes I sit and contemplate what I am doing and I think, Isn't this complete common sense?" Fiennes said. "Doesn't everyone think like this?" Late in the afternoon, we headed out of Holkham on a typical Norfolk lane, lined with hedgerows. Hedges, mostly hawthorn and blackthorn, are a distinctive feature of the British countryside. They delineate fields, but they also provide invaluable habitat and food for birds, insects, and plant life. An estimated two hundred and fifty thousand miles of the nation's hedges-about a third of the total-were destroyed in the second half of the twentieth century. Fiennes loves hedges; he keeps pictures of them on his phone. He believes that a proper hedge should be allowed to grow to its natural height, about twelve feet, at which point it forms a natural dome that keeps rain off the wildlife that lives inside.

September is the start of British hedgecutting season. On either side of the road, harvested wheat fields were lined with brutally cut, square-topped ribbons of vegetation. "This is hedges of no benefit," Fiennes murmured. Then he slammed on his brakes in the middle of a straight section of road. "What the fuck is that?" he yelled, leaning over me to point out of the passenger window. A hawthorn hedge had been cut back almost to its stumps. Some ivy clung on. Fiennes was beside himself. It was an example of what he calls "Taliban farming"-pointlessly hostile to the natural world. "It's got no food," he said. "It's been flailed within an inch of its life. It's ... what is it? Four feet wide? There's a fucking-a couple of fat pigeon sitting on it. I'm sorry." Fiennes stopped for air. "I come through this bit, and it is just ... what the fuck? This is a completely fucked landscape."

When Fiennes was about ten years old, he painted his face white to blend in with the chickens that he kept in the garden. His father, Mark, was a tenant farmer in the sixties, before he turned to photography. His mother, Jennifer Lash, known as Jini, wrote her first novel, "The Burial," when she was nine-

teen, after running away from her family. Jake and Joseph were the youngest of the couple's six children. (They fostered a seventh.) Mark and Jini made money by buying and renovating houses in the English countryside. Fiennes went to thirteen schools. He won't abide a romantic reading of Fiennes family life. "Strapped for cash. Trying to put food on the table. Trying to educate. Leaning on close friends," he recalled.

Fiennes's refuge and passion was nature. For several years, in Wiltshire, the family lived opposite a traditional, mixed English farm. Fiennes kept slowworms, a kind of legless lizard, which he fed slugs. He caught hornets and stored roadkill in the freezer. "If you pull out any family pictures, it's Jake with jellyfish, Jake with insects," Joseph told me. For Fiennes's sixteenth birthday, Jini gave him a stuffed fox, which he keeps in his living room. (Ralph later gave him a towel with a black sheep on it.) I asked Fiennes once if he could explain why he took such a different path from his siblings'. "Actually, the other five were the odd ones out," he replied. "I was the normal one."

Fiennes dropped out of school at sixteen. A friend of his sister Martha got him a job doing P.R. for Limelight, a London night club, which, like its sister outlet in New York, was in a large, deconsecrated church. In 1987, when he was seventeen, Fiennes helped organize a party for George Michael's album "Faith." Limelight flowed with drugs and money. "Maybe I should have pulled out when I found half a kilo of coke in the reception drawer," Fiennes told me. Both Sophie and Joseph described the teen-age Fiennes as a species in the wrong habitat. "He was an animal that needed to get out," Sophie said. Fiennes had a huge expense account; he developed eczema. "Lack of sleep," he told me. "Stolichnaya on ice." His parents arranged for him to dry out at Knepp Castle, in West Sussex, about forty miles south of London. Fiennes turned up to help out for a week during lambing season wearing a black trenchcoat and leather gloves.

He stayed for three years. The Knepp estate, which covers about three and a half thousand acres, had recently been inherited by Charlie Burrell, a twentyfive-year-old aristocrat. Burrell's girlfriend, a travel writer named Isabella

Tree, had lived up the road from the Fienneses as a teen-ager. Soon after Fiennes arrived, the three of them moved in to the castle, which had not been modernized since the war, when it was the headquarters of the 1st Canadian Division. There were coal fires and blackout curtains. The family kept their possessions in old military lockers. "You turned on a light and flew across the room," Tree recalled. Fiennes slept in the bachelor wing, on the top floor.

During the day, he worked on the farm. Fiennes doesn't read easily. He has acquired virtually all his knowledge through conversation and making connections for himself. "It is hysterical questioning," Sophie, who is also dyslexi told me. "Why is that there? Why was that?" At Knepp, Fiennes befriended = woodman named Chris Wagstaff. forester is looking at trees, and he's looking at income from trees," Fiennes enplained. "A woodman cares for the wood and maintains it, enhances it.... He knows the importance of the bats and the flora." Fiennes cycled through the departments of the farm. With Burre and Tree, he drank bottles of old wine from the cellar, whose labels had rotted off. Fiennes became close to Burrell, who at the time was struggling with the economics of the estate. "It was very good for me to have Jake around," Burrell said "The responsibility was pretty crushing

In 1994, Fiennes left Knepp to work as a gamekeeper at Stanage Castle, in Wales, which ran a commercial pheasant shoot. Each year, the shooting industry releases as many as fifty million game birds—predominantly non-native pheasants—into the British countryside. By some estimates, these birds account for a quarter of the country's avian biomass "It was industrial," Fiennes told me. He lost an entire hatch, nine and a half thousand chicks, to rotavirus. He had to clear them out with a shovel. "It wasn't great he said. "And it rained. The fucking rain."

Fiennes's father saw that he was unhappy and, in early 1995, arranged for Fiennes to meet Nicholas Bacon, a landowner in Norfolk who is the premier baronet of England and a close friend of Prince Charles. Bacon's family has owned the Raveningham estate, southeast of Norwich, since 1735. Bacon was a serious beekeeper. When he met Fiennes, who was twenty-four, there wasn't a job opening. But he was struck by Fiennes's ideas about how to look after the birds. "There was definitely an energy and an ambitious energy," Bacon told me. He took on Fiennes as a junior gamekeeper. At the same time, he worried. "What can you do? How can you progress, other than becoming head keeper?"Bacon wondered. "And then what?"

Within six years, Fiennes was running Raveningham. When I met So-

phie, I asked her if Fiennes was driven by the same forces that have compelled his more famous siblings. "There is a lot of writing about people performing onstage and imagining that the parent is watching them. I think it's no different," she told me. "I think the real sadness for Jake is that he hasn't had that witness." Jini died in 1993. Mark

died in 2004. "I always felt like I was a very poor substitute, witnessing what he had created," Sophie said. "My mother would have just been so totally buzzed by what he was making happen."

t Raveningham, Fiennes's job was to make sure there were birds to shoot. Unusually, the estate did not farm pheasants, instead relying on a surplus of wild game. Fiennes rose before dawn to check about two hundred and fifty traps—for predators such as rats, stoats, and weasels-across the five and a half thousand acres of the estate, before walking the fields and hedgerows, inspecting nesting sites for pheasant chicks and sawfly populations that they would eat. "He was a complete man of nature," Bacon said. Fiennes tracked foxes by following the alarm calls of blackbirds. He got drenched in the dew.

During Fiennes's first season, there were blank drives—times when there were no birds in the air. He noticed that the estate's bags—its shooting records had peaked in 1963, during the country's switch to intensive agriculture. The reason that so many pheasants are released in Britain each year is that there is no food or space for them on modern farmland. Between 1967 and 2010, the population of the gray partridge, the country's traditional hunting quarry, fell by ninety-one per cent. Fiennes realized that Raveningham's game birds

were in danger of disappearing. "It was at the point where if you don't do something drastic you will lose something," he said.

In the late nineties, the farming operation at Raveningham went Taliban. A new estate manager shifted away from cereals to crops such as carrots, potatoes, and fruit, which were more lucrative but also more resource-intensive. The hedges were flailed. Fields were

sown to the edges and doused in chemicals. Fiennes watched the estate's bird and insect populations shrink further. At the time, the C.A.P. ordered farmers to set aside ten per cent of their land, to limit food production, but allowed them to spray and mow their fallow fields in the spring. "Everything that is going to nest

in it, you are just going to kill it,"Fiennes said. "Who the fuck dreamed that up?"

The estate used paraquat, a herbicide that killed hares. Fiennes despaired. "You don't see it from the tractor cab," he said. "You see it on the ground." One day, he broke down in a field and wept. "I could take you to the spot right now," he said. "The guys that see the rainforest destruction, they're emotional and everything." Fiennes confronted Bacon about what he was witnessing, and the new manager left.

In 2001, Bacon contracted out the farming work at Raveningham and put Fiennes in charge of the estate. The baronet summarizes Fiennes's environmental approach to agriculture as "farming badly." Fiennes prefers to speak about making space for nature. In 2002, Fiennes took a hundred and forty acres that had been drained in the sixties, to plant crops, and used earthmovers to turn the area back into wetlands, which he used to graze cattle. Birds that had been absent-lapwing, snipe, and marsh harriers-came rushing back. The marshes now have higher breeding rates than surrounding nature reserves. "I want more edge. Everything is about edge," he told me once. "Whatever it ismower, mouth, footpath, deer trail ... I put my footprint on the ground, I create an edge." Fiennes planted twenty-five miles of hedges across the estate and thinned the woodlands, bringing in light.

He replanted trees according to marks on old maps and brought back sheep to graze the lawn for the first time in a hundred years.

It is a form of order that he craves. "Nature is random, but it is wonderfully organized," Fiennes said. "You start throwing any sort of regular management theme and it starts to react." One of his greatest pleasures is to realign a field. Fiennes looks for wet patches, changes in soil, and corners where a combine harvester or a boom spray can't reach-and turns the land over to plants that will benefit birds and insects. Raveningham's fields came to contain triangles and rectangles of wildflowers where Fiennes ruled that crops would be unproductive. He did this by compulsive observation. "Why aren't the cattle going here? And why is the crow sitting on that post but not that one? And the fox is walking up this path," Fiennes said. "You can just feel how it is all working with one another."

While Fiennes modified the farming at Raveningham, his friends at Knepp Castle stopped growing crops altogether. In 2001, Burrell and Tree began the process of turning the estate over to nature; Knepp is now one of the country's best-known re-wilding projects. Through the years, Fiennes and Burrell have encouraged each other. "You need to have someone say, Just get on to it. What are you waiting for?" Burrell told me. But Fiennes does not associate the recovery of the countryside with abandonment. "How can I engage with a hundred and four thousand farm holdings in England and you're saying, 'Just let it go'? I can't," Fiennes said. "Everything has got to be managed."

Fiennes prefers to think of wildlife as another product to be grown as efficiently as possible. At Raveningham, he invited researchers to count moths and to identify the snails in the ponds. He centralized the farm buildings and encouraged neighboring farmers to pool assets, such as vehicles. On a two-hundred-and-fifty-acre plot on the estate, Fiennes removed buildings and aligned openings in the hedges to reduce vehicle movements and soil compaction-a kind of farming Taylorism-which meant that the crops could be cultivated in nine days. The plot was one of the most profitable parts of the estate.



For many years, Fiennes's job title remained gamekeeper. He checked his traps and then went for meetings at the estate office, working fourteen-hour days. He married an equine nurse, and they lived in a converted red brick schoolhouse with their two young children. In part because of his overwork, Fiennes's marriage foundered. He developed alopecia. His hair fell out and grew back white. The schoolhouse sat in the corner of a field. Outside, Fiennes would experiment with a band of hav meadow that he planted along the hedge. Orchids crept in from a wood nearby. In the evenings, he counted cowslips with his daughter, Teale. "I think one year it was eleven, and the next year there were twenty-seven, and the next year there were thirty-seven,"Fiennes recalled."And then the next year it was just 'Fuck. There are too many. There are thousands.""

n the day that Britain voted to leave the E.U., Fiennes was judging a local agricultural competition with Mark Cocker, a nature writer. Cocker lives seven miles from Raveningham. For years, he had heard of a maverick gamekeeper who was doing interesting things on the estate. In 2015, Cocker finally met Fiennes for an article he was writing about shooting. He was bowled over by the hedges, the hares, and the abundant birdlife. One day, Fiennes rang him up because a field of cover crops, which he had planted as sheep feed, was alive with pollen beetles and swarming with hundreds of swifts and house martins.

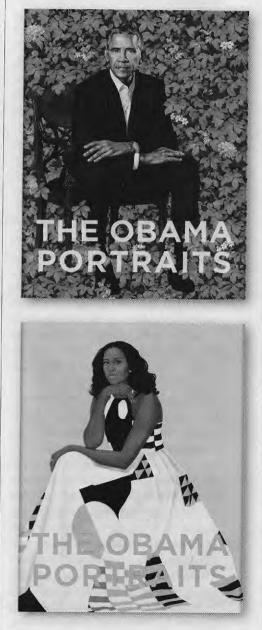
"The critical thing about Jake is, because he is obsessive-compulsive, he is obsessive-compulsive about his conservation work in a way that almost no land managers are," Cocker said. At Raveningham, Fiennes removed about twenty per cent of the estate, more than a thousand acres, from food production. But his yields increased enough to cancel out the difference.

Cocker is an authority on British birds and a severe critic of modern agriculture. In 2018, he published "Our Place," a book about the British countryside. Cocker devoted a chapter to Fiennes, who he believes offers a middle way, of both growing food and restoring the environment. Much of what Fiennes does is simply an exacting form

of traditional, mixed British farming. But understanding the dynamics of this system-a complex interplay of soil health, carbon sequestration, livestock disturbance, insect life and birdlife-is an emerging science. In 2015, after a sixyear study, researchers at the U.K. Centre for Ecology & Hydrology concluded that harvests of major commodities, including wheat, remained steady when eight per cent of fields were given over to wildlife-friendly grasses and flowers. The yields of some crops, such as field beans, rose by thirty-five per cent. "He's a radical in the sense that this actually can be delivered," Cocker told me. "This is a change in the entirety of British agriculture, which Jake could exemplify."

Farmers across the world benefit from state support. On January 31st, Britain left the E.U. The country now faces the question of what kinds of subsidies its farmers should receive. The C.A.P. has accounted for about half the income of most farms, a total of £3.5 billion a year. Eighty per cent of this came in the form of a "basic payment" for how much land the farmers looked after, with most of the rest coming from environmental incentives. (At Raveningham, Fiennes supplemented the estate's income by taking part in dozens of these initiatives.) In January, 2018, Michael Gove, the U.K.'s Environment Secretary at the time, announced that, after Brexit, farmers would be paid "public money for public goods"-such as projects to improve soil health, plant trees, and mitigate climate change. Gove also announced a new, twenty-five-year plan for the British environment, based on the principle of "natural capital," in which the nation's air, water, soil, and biodiversity will be reimagined as an economic resource.

The plan is largely the result of work by Dieter Helm, an economist at the University of Oxford. Helm, who is sixty-three, spent much of his childhood on his grandparents' farm, on the Essex coast. In 1967, when he was eleven, his grandparents sold up. He watched the new farmer blow up the hedgerows. "I remember that dynamite going off," Helm told me. "I knew which birds nested where. I knew exactly where the barn owl was. I knew the whole thing." Since 2012, Helm, who is also an expert on energy and utilities markets, has been A richly illustrated celebration of the paintings of President Barack Obama and First Lady Michelle Obama



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the chair of the government's Natural Capital Committee.

According to Helm, it is possible that British farming, which has revenues of around nine billion pounds a year, is currently worthless-once you take away its subsidies and the damage that it causes to the nation's waterways and wildlife. But the benefits offered by new forms of agriculture, such as vertical farming, or the restoration of wetlands, to sequester carbon, or nature-friendly food production, such as Fiennes's, are potentially enormous."I think the tide has gone out on the agricultural system we have. I think that's over," Helm said. "If you look at where the science is going, we have this fabulous opportunity not to drench the land in chemicals and actually to use the land to much greater effect."

Helm is not naïve about the state of the natural world. "If you scratch deep down, I think we're stuffed," he said, when we met in his rooms in Oxford last year. "If you look globally, it looks awful. But it doesn't get you anywhere." Even pessimists accept that Brexit has offered a chance for the nation's farms to take a new path. In 2021, the government plans to begin a seven-year transition out of the C.A.P. and into the new Environmental Land Management System.

Some farms will go bankrupt. The U.K.'s National Audit Office has described the move to ELMS as "complex, difficult and high-risk." The median age of British farmers is sixty. An estimated forty-two per cent of English farmers rely on the C.A.P. to break even. "It's going to be quite a time of turmoil," Sansome, of Natural England, told me. "And it's inevitable there will be some casualties." Batters, the National Farmers Union president, pointed out that raising environmental standards will also leave British farmers competing with food produced under lower standards overseas. The sector will be vulnerable in post-Brexit trade negotiations with the E.U. and the U.S. "It is all very well doing the right thing," Batters said. "But if you are going to have to import food that doesn't abide by those rules, all you are going to do is put your guys out of business."

Fiennes voted against Brexit, but he quickly embraced its implications for farming. After the vote, he invited journalists and policymakers on tours of Raveningham. "We need the twelve

apostles of agriculture," he told me once, half joking. He has pushed for Holkham to become a test bed for the new farming policy. "The opportunity at the moment is phenomenal," he said. Last summer, Lord Leicester committed Holkham to becoming "cides-free" by 2030.

In November, Fiennes and James Beamish, Holkham's farm manager, gave a tour to officials from the U.K.'s Department for Environment, Food, & Rural Affairs. A few weeks earlier, a tenant had given up a lease on two hundred and fifty acres of fields-about the size of an average British farm-which would become a pilot for environmental farming. We stood on a sloping path in a cold wind. The plot, known as Great Farm, wasn't in great shape. The previous tenant was lifting his last crop, of sugar beets, and a tractor trailer rumbled past. In front of us, a field of oilseed rape had failed, infested by cabbage-stem flea beetles, which can arise when crop rotations are bunched too close together. "They have farmed it quite hard, shall we say," Beamish said. He invited the officials to inspect the withered plants. "They look as though they've been shot with a shotgun."

During the winter, Fiennes and Beamish were conducting baseline counts of birds and mammals on the site. Scientists were testing soil cores. Following the Earl's pledge, Beamish was planning to cut chemical use to a minimum. "We've relied very heavily on what comes out of the plastic can or out of a fertilizer bag, and where has that got us today?" Beamish said to the officials. Beamish is a veteran Norfolk farmer. When Fiennes was hired at Holkham, he was skeptical. "The alarm bells went off a little bit," Beamish told me. "What are we in for?" On the track at Great Farm, he sounded like a convert. Fiennes explained that the experiment must be replicable."We need to demonstrate that what we are doing is currently available to everyone," he said. "We don't want to be doing anything really unique."

Fiennes starts the day with coffee and a cigarette. One morning last fall, around dawn, we drove out to some low-lying fields, which used to be salt creeks. As he did at Raveningham, Fiennes had hired a ditcher to reinstate the old water channels and create new

ones, ahead of turning the fields into grazing wetlands. Fiennes drove his truck slowly along the fresh, muddy scars in the ground, which would flood in the winter. "Sexy curves, love it," he said "This is going to be amazing. Edge, lots of edge. Lots of dead ends." He talked about a software project that he was commissioning to calculate an equation of surface water, grass height, and cattlestocking density for the perfect management of lapwing. He kept a running commentary on the grasses and the weeds. "This is silverweed, and then you have got groundsel," Fiennes said. "It will be interesting to see how the geese react. Those thistles, seed for the goldfinches." Two birds took off, bobbing frantically in flight. "Snipe," Fiennes said. "Very good to eat."

Fiennes caught up with the ditcher in a field close to Holkham Beach, not far from where my friends encountered him last summer. Lord Leicester, in blue running shorts, was in the cab, talking to the contractor. The field was next to Lady Anne's Drive, the main entrance to Holkham's nature reserve. The road is lined with poplar trees, planted about forty years ago, which Fiennes is planning to cut down and replace with scrubs and bushes, to restore the original landscape of the wetlands. He felt that the trees were also blocking the view of the marshes and the birds. "I have the opportunity to engage with a fuck of a lot of people," he said. "I see it as my duty to try and force nature down their throat."

A few months later, we were back on Lady Anne's Drive. There had been heavy rain during the fall, and Fiennes's new wetlands were shining under a low, late-afternoon sun. There were wigeon and teal and pink-footed geese, which overwinter in the tens of thousands in north Norfolk on their way to Greenland. The previous weekend, wardens had counted about eighty thousand birds at Holkham. A line of bird-watchers, with cameras and telescopes, had materialized at the edge of the parking lot. The light was failing, and the wetlands were still. Without warning, a host of lapwing took off on our right. "Look at that, they are all getting up!" Fiennes called. "Fucking clouds of them. Phenomenal."The lapwing wheeled against the sunset. Coke's monument showed above the trees. .