

Archive of Possible Loss

Tine Hens

An extract pp 257-279

Original title Archief van mogelijk verlies
Publisher EPO, 2025

Translation Dutch into English
Translator Liz Waters

© Tine Hens/Liz Waters/EPO/Flanders Literature – this text cannot be copied nor made public by means of (digital) print, copy, internet or in any other way without prior consent from the rights holders.

p 257-279

Lapwing

A storm is forecast and I'm standing with a lapwing chick in my hands on boggy grassland at a bend in the River Scheldt. His little heart thumps furiously against my palms as if there inside the delicate body enclosed by my fingers the storm has already broken. It's difficult to know what a bird's heart is telling you, or what a bird is thinking, but from the panicky wrenching of its wings I deduce that he too is anything but relaxed. His agitation is a good sign. This bird needs to learn to distrust people.

The down on his breast tickles my fingertips. Having looked up 'anatomy of a wing', I know that the bones scraping the ball of my thumb with every breath are his hand and finger bones. Birds existed before humans. In evolutionary terms their wings became our hands, or our hands are plucked wings.

(I write he and him, but it's just as likely to be she and her, or they and them; with an eight-week-old lapwing chick it takes close inspection to discover sexual characteristics, and for convenience's sake I assume they don't generally make an issue of it. But again, we have no idea. We merely act. We merely think. We merely presume. Often with the best of intentions. No less often with far from the best of results.)

Eyes fixed on me, he stretches his neck in the space between my thumbs. He trembles. I stroke his frail bones warily, fearful of breaking them, fearful of applying more pressure than necessary, and while my hands ride with the jolts of his shallow breathing I hold my breath, trying to become light as a feather, hollow as bird bones, insubstantial as a bird. Since birds can hold air deep inside them, they effortlessly escape gravity. However hard we train, our muscles will always be too weak, our bones too heavy to come free of the earth without exhaust fumes and jet engines.

The bird in my hand has never flown before.

Each time he spread his wings, he bumped into a steel-mesh ceiling that forced him back onto his legs. He was raised in a cage because out on the land he'd have no chance these days. He was picked up as an egg and so escaped death by pulverization under the tyres of a muck spreader, crop sprayer or plough. In an egg carton, swathed in quilted blankets, he was taken on a back seat to the animal rescue shelter, where along with other salvaged eggs, of lapwings, curlews, black-tailed godwits, oystercatchers – all birds whose eggs and chicks are more often crushed on today's fields than

hatched – he was laid in the incubator at a constant temperature of 37.8 degrees and a relative humidity of 65 per cent.

He took his first steps on a bristly plastic astroturf mat. The first warmth and softness he felt were those of a cuddly toy elephant and an infrared lamp. He pecked mealworms, cockroaches, crickets and buffalo worms out of a bowl. When evening fell and the cold crept in through cracks and ventilation shafts, he snuggled up against other lapwing chicks to stave off hypothermia. Or to feel less alone – maybe that was it. It's hard to say what goes on in the head of a lapwing chick that came into the world an orphan, not because he lost his parents but because he was removed from the nest before he could get to know them.

How does a parentless bird grow up?

Who does he emulate?

'It works out fine,' they say at the rescue centre, although they stress that this kind of fostering must remain the absolute exception. It's the emergency brake, the intensive care to which the neglectfulness and violence of the way part of humanity treats the rest of life lead. The near-insane obstinacy of our attempts to keep species going amounts to living proof of the depressing seriousness of the situation. An era of material abundance for some has ushered in an era of profound loss. Our tenacity in mounting rescue missions points to a stubborn hope, an intransigent faith no less human than our habit of heedless destruction.

A lapwing cannot know it, but as soon as it settles on arable land, it enters an economic forcefield. The male may do his very best to fashion a scrape in the increasingly dry and hard earth, the female may then succeed in laying four eggs, one per day, and although she attempts to hatch each of them in turn, she rarely if ever succeeds. The time management of the lapwing clashes with that of the farmer. He needs to plough, harrow, dress with fertilizer, sow, spray, get the maximum out of his fields, while lapwings are sitting on their nests, and yes, in the process the eggs are destroyed or the chicks killed. Not because the farmer wants to kill them but because time is money and, like money, time is limited. He needs to pay off his loan from the bank, doesn't he? So how can he fret about birds?

The winners, that's how I should look at these fostered birds according to the people at the rescue centre.

If the eggs weren't removed and the chicks artificially incubated and fed, first in a box, then behind glass and later in an outdoor cage, they'd be irretrievably lost, ploughed under, flattened – but in my head I add up all the things that they're missing.

They've never felt the warmth and soft weight of their mother or father on top of them,
never melted into the down of a parent's belly,
never found shelter in the undulating fat of a mother or father's breast,
never huddled under their wings,
never heard their calls
never pulled a worm out of the ground for themselves,
never set eyes on a lapwing bigger than they are.

But they have passed one important and definitive test. They greedily dived at the live insects their regular carer threw into their cage one day. They were ready. The time had come to fledge.

The storm rolling in from the north has meanwhile acquired a name. Poly. The lapwing is called EHTL, I read on the ring around its leg; a name like a food additive. I stand ready to release him, the bird that has never flown but is now the bright hope of his species.

That creatures can die out was inconceivable, until it no longer was.

In about 1680, British biologist, physicist, geologist and architect Robert Hooke stood at the top of a cliff on the Isle of Portland, a peninsula on England's south coast. He stooped to peer

concentratedly at the spirals, circles and zigzagging stripes in the dazzling-white rocks that stood ready to be shipped to the mainland, where much of London had burned to the ground. Shortly after that catastrophe, wood was banned as a building material and the white limestone of Portland chosen for the construction of public buildings, St Paul's Cathedral and a memorial column. The fact that the quarrying was done by convicts sentenced to hard labour kept the price down. That was a bonus.

As master builder, it was Hooke's job to oversee the work, but now he was completely enthralled by those rock drawings in the limestone that looked like sea creatures. The idea that these were animals that had permanently disappeared went against everything he was expected to believe: that the earth was 6,000 years old, as the Bible said, and that fossils were imprints of organisms that existed somewhere on earth but had not yet been found. Our dear Lord had after all created a perfect world. Hooke became the first to suggest, cautiously and with some reluctance, that those creatures had not yet been found because they no longer existed.

They were extinct.

What Hooke could not have suspected was that at around the same time, on an island ten thousand kilometres away, a flightless bird was actively proving his theory by putting it into practice. We don't know where, how or when the last dodo died, but we do know that his or her death marked the end of the species. Less than a century after dodos and humans first met, a dodo was spotted for the last time. Not that this caused consternation or collective grief, or even that its definitive disappearance was noticed. Several centuries would pass before the dodo grew into an icon of extinction as a result of human influence, becoming more famous dead than he'd ever been in life.

For as long as he lived, people had mostly looked down on him. He might have been the biggest ever pigeon, but that was not a characteristic that commanded respect. Ridicule and contempt were his lot. He was described as stupid, fat, tame and, despite all the flesh on his bones, not even particularly tasty.

Walghvoghel or 'revolting bird' the Dutch seafarers called him, after they became stranded on Mauritius in 1598, declared the land their property and were amazed how easy it was to lure the waddling flightless birds, catch and pluck them, and roast them over an open fire. 'Revolting' was the common reaction when they took their first mouthfuls. Only the breast and belly were found mildly palatable, but at least the bird now had a name, and from then on they killed it primarily for their own malicious pleasure. It was sufficient, the story went, to grab a dodo, squeeze him until he screeched and then pick up from the ground the other members of the species that rushed to help their friend in need. How stupid can you be, how naive and gullible, they grinned as they clubbed another twenty to death.

Since dodos had no natural enemies, they failed to recognize one when it was standing in front of them. After bats, humans were the first mammals to reach Mauritius. The Dutch plonked a supply post there and in their wake rats, cats, dogs, pigs and macaques shipped from the East Indies swarmed over the island, throwing themselves at a profusion of birds, amphibians and crustaceans that, like the dodo, had never had much to fear and now failed to fully comprehend what was happening to them.

In 1710 the Dutch left the island and by then the dodo had probably been extinct for almost forty years. Was the last of the species, the endling, throttled by a hungry sailor, after which a rat predated the last of the eggs? Did he die of old age? Did he succumb to a disease harboured by the saliva of rats and cats? Did he bite too greedily into a fermenting fruit and sink intoxicated into a swamp? We have no idea. Any more than we know what he liked to eat, other than fallen fruit, how he seduced his partner, spent his day, or even what he looked like. We know dinosaurs with whom we never shared the earth better than we know the dodo.

The rapid sketches that Joris Joostensz Laerle made when he travelled on board the Gelderland from 1601 to 1603 are probably the most accurate portraits we have of the dodo. They

show a more agile and slender bird than we are used to. Our image of the dodo is determined mainly by Edwards' Dodo by Roelant Savery, who probably painted one of the specimens that were caught alive and shipped home. After a monotonous diet of ship's biscuit and a lack of exercise, they suffered from obesity. The standard depiction of the dodo was of an overweight bird.

It seems unlikely that Hooke ever saw a living dodo. Depending which source you believe, either eleven or fourteen dodos ended up in private collections belonging to kings, dukes and other worthies in cities ranging from Prague and Amsterdam to London and Nagasaki. This was the era of cabinets of curiosities, and the dodo with its tiny head and its beak like a dildo was without doubt a curiosity. In 1635, seven years before Hooke's birth on the Isle of Wight, British diplomat Emmanuel Altham had sent his family a dodo. It might make a good pet, he thought, and if not a good pet then it was at least an exotic object of interest that would impress others of his social class.

Did the captain of The William, the ship with the dodo on board, offload him to a higher bidder on arrival? Did the dodo prove less than excellent company? Did he pine away for lack of friends until a new owner could no longer bear that melancholy look and hanging head? Did the dodo suffer from flatulence after all those ship's biscuits and create an unbearable stench? We don't know. We only know that in 1638, when Hooke was still a sickly child of three, the writer Hamon L'Estrange saw a dodo in a freakshow somewhere near Lincoln's Inn Fields. What L'Estrange mainly remembered was that the feathers had a pheasant-like colour and that the bird ate pebbles. Nothing more was ever written about a live dodo.

Hooke didn't move to London till ten years later. As a thirteen-year-old orphan he was apprenticed to a painter, attended lessons at Westminster College and became an assistant to Robert Boyle, for whom he perfected the vacuum pump, an instrument with which one day the air would be sucked from the lungs of a lark to prove that we cannot live without breathing.

It's unclear where the dodo was all those years, who cared for him and whether his presence in London drew many visitors. He would turn up again only as a stuffed specimen, first in the private collection of a rich family and later in the Ashmolean Museum in Oxford.

Hooke probably never saw one alive, but after the dodo's death they might perhaps have met.

Still, he could not imagine that this bird with the plump legs, head like a door knocker and small eyes amounted to proof of the extinction theory that he only once publicly defended. He afterwards fell silent on the subject: the resistance was too great.

Not until a century later would French naturalist Georges Cuvier lay the bones of mastodons, mammoths and giant lizards side by side and raise to the status of fact the idea that Hooke had cautiously advanced. In a tone that brooked no contradiction, Cuvier posited that yes, species can die out. The inconceivable had become conceivable.

Dying is rather different from dying out, I once heard someone say. Dying is accompanied by memories, by a date of death, a public announcement; dying out happens soundlessly and leaves a crater in natural history's memory. On Mauritius, cats, rats, goats and pigs filled the empty space left by the dodo. The primal forest in which he had wandered amiably for millions of years, where he'd brought up his chicks and where he knew the smells and sounds, was felled in the decades that followed and replaced by plantations of sugar cane, a cash crop.

The bones of the dodos that died on Mauritius sank into the swampy soil. So few traces remained that after a while people began to doubt whether the dodo had been a real or imagined creature. In Prague lay an upper mandible, in Copenhagen a skull, and the stuffed specimen in Oxford was nibbled by mites. The feathers turned to dust, the body frayed to shreds. Only the head and the right foot were amputated just in time and kept in a drawer. They are all that is left to us of the dodo.

Nowadays we record the process of possible extinction according to a neat list of specific categories that exudes the calm provided by all forms of order and overview. Classification, compartmentalization and demarcation are adult versions of a child's lullaby.

'Not evaluated' and 'data deficient,' we note, and we decide that anything is possible, that nothing is final or out of the question.

'Least concern,' we write, and we decide there's no problem at all.

Only when we record 'near threatened', 'vulnerable' and 'endangered' does heavy-heartedness creep in, because how threatened or vulnerable? To what degree endangered? Is the process reversible? Research is vital! 'Critically endangered,' we note when we decide that the process is not irreversible, that all the signals really are flashing red now, that the alarms are sounding, that all forms of help should be accepted, that all taboos can be jettisoned.

'Extinct in the wild,' we note, which brings to mind the velvet gloves or discreet box of paper tissues in the waiting room at the funeral director's. We know it's almost too late, but there is still time to say hello; it's only when we have to record 'extinct' that it's all over, and even then the end is not necessarily definitive, because if all has gone to plan we'll have collected sufficient DNA in storage containers full of liquid nitrogen.

The successive stages give the impression of gradualness. As if there's always time to reverse the process. But the dodo has shown that it takes less effort to go from 'least concern' to 'endangered' than to move in the other direction. Inattention, lack of interest, a naive sense of superiority, coarse cackhandedness, obtuse cruelty, disgusting destructiveness: any one of these can mean that in the blink of an eye 'not evaluated' turns into 'extinct'. For the dodo it took less than a century.

For many years lapwings were counted not in numbers but in letters. P for present stands next to the lapwing year after year in charts that stretch back half a century. A bird that repeatedly achieves the highest score, a bird that excels, a bird with an outstanding report, although that P indicates above all that it was ticked off routinely, the way that on automatic pilot we check children's presence in class.

– Lapwing?

– Present!

They were as common as pigeons, and that P said everything we needed to know. 'Least concern' was the bird's basic category. From the 1990s onwards the switch to numbers occurred. And those numbers were still impressive. There was talk of twenty thousand breeding pairs in Flanders and twice as many in the Netherlands.

Bird ringers remember picking the young chicks out of fields and verges like fresh clover and how they had to step carefully to avoid treading on them, since they shot off in all directions like grasshoppers when disturbed. Nowadays scientists don't exclude the possibility – they estimate the chances at fifty-fifty, leaving some latitude – that the lapwing will have disappeared from Flanders by 2035. In the Netherlands, too, 'the decline towards egress has set in'.

The cracks in their existence started to show around the turn of the century. There were still a great many of them. The numbers had a reassuring effect, but anyone counting their nests saw something odd. Eggs were laid, four times over if necessary, but the lapwing chicks, those pattering balls of down, their buckling legs spindly as toothpicks, seemed to have vanished into thin air. They were no longer plucked out of the verges like clover. They no longer sprang away like grasshoppers when you set foot in the fields.

The lapwing was still there. The young increasingly absent.

The power of the lapwing had always been its ability to adapt.

When the wet heaths were drained and its original habitat disappeared, the lapwing moved to the fen meadows. When the fen meadows disappeared because they were economically unproductive, the lapwing moved to the wildflower meadows.

When the wildflower meadows disappeared because cattle were kept in their sheds to fatten more quickly by moving less, and turbo grass gained favour because it grew rapidly and crowded out everything that flowered, the lapwing moved to the arable fields.

When the machines came, thundering over the farmland to do everything that intensive agriculture demands, the lapwing didn't move again. He left.

'You never had to search to find them,' I can still hear Marc Herremans say. Once he was the youngest bird ringer in the country, barely five when his father taught him how, and after his father's all too early death he went on ringing as a way of remembering him.

Generalists would make it, they said then. It was the specialists you needed to worry about. The lapwing is a generalist. Persistent, never giving up. Capable of starting again after every failed nest.

– So if even the lapwing's survival is uncertain.

Marc didn't finish his sentence. He hid behind his binoculars and scanned the horizon from right to left.

– Up there you ought to see them tumbling now, and hear their 'cheew-eet, cheew-eet'.

A metallic sound, like the receiver on which a radio amateur carefully turns the dial in search of soundwaves, that's how it's been described.

– Cheew-eet! Cheew-eet!

One of them skimmed over the maize stubble – cheew-eet! cheew-eet! – unfolding his wings as a parachute before shooting upwards again. Marc counted and spoke his observations into his phone.

– Five, courtship display, searching, not nesting, activity unclear.

Almost routinely, as if describing the unchanging condition of a coma patient, he explained what was wrong with the lapwings. 'They wait. As if they've learned that if they lay their eggs too soon there's a good chance they'll lose their nest in the energetic cultivation of the land. By laying later, the risk of food shortage is increased. Soils dry out, becoming rock hard and impenetrable as concrete. If there are worms or larvae, and on the fields that's no longer certain, then they can't get at them with their beaks.'

I listened to what he was saying, took note of him knocking a post with his knuckles to illustrate the hardness of the ground, but mainly I looked in fascination at something that was sitting two metres from our feet, on the boundary between field and verge.

A lapwing tilted his head a bit to the right and stared at us with jet-black beady eyes as if challenging us to a staring competition, which he was bound to win because birds have three eyelids and blink only when they move their heads.

'Abnormal behaviour,' Marc mumbled into his phone. 'This bird ought to be making a scrape for a nest by turning round and round on the soil, not scratching about rather aimlessly in a strip of vegetation.'

In 2015 the European branch of the International Union for Conservation of Nature revised the status of the lapwing, changing it from 'least concern' to 'near threatened', before raising it again a year later to 'endangered'. In Flanders the population shrank by 60 per cent between 2007 and 2016, meaning it had shifted from a bird that caused no concern to a species on the red list, locally threatened with extinction.

A thing is bendable until it breaks.

In the summer in which I was born, news went around the world that in the wettest part of the Hawaiian rainforest a new bird had been discovered. It was seen for the first time a year earlier, but now its status as a newcomer had been officially confirmed. This was in August 1974.

The little finch-like bird was inconspicuous in every respect and therefore different from the finches that are found only on the Hawaiian islands. Or were found. Of the fifty-five known species, more than half are extinct. It's earned Hawaii the dubious title of 'extinction capital of the world'.

If a new species turns up at a place known for species loss, the first response is excitement, but also disbelief.

Was that little bird with its brown feathers, its exceptionally short tail and black mask, a creature that made no sound other than a short 'chick', a new species or a vagrant? Had it been blown to Hawaii like its ancestors 3.5 to 5 million years ago on a favourable wind? Or was it exotic, invasive, and therefore perhaps requiring control? To know all of that, it was necessary first to analyse the bird in every detail, including its genes.

The day on which my mother learned she was pregnant for the fifth time and hoped that after two sons and two miscarriages this child would a) survive and b) be a daughter, in the wettest part of the Hawaiian rainforest two specimens of what was provisionally called a 'mystery bird' were shot to determine their identity once and for all. It was the autumn of 1973.

The DNA from the fragments of skin scraped from it confirmed suspicions. This bird represented a newly discovered species. Linguist Mary Kawena Pokui was called in, studied one of the dead birds from top to toe and gave it the name po'o-uli, meaning black-masked.

Two hundred. That was how many were thought to be flying around in the wet, misty rainforest on the island of Maui. Fossil remains elsewhere indicated that it had once been a bird like the lapwing. A bird in the top class. Impossible to count, but manifestly present.

So soon after discovery, it was regarded as 'endangered'.

So soon after discovery, an initial protection plan was drawn up. People would make a start on observing and studying the po'o-uli. Humans would become the po'o-uli's heartrate monitor. Though well intended, this soon proved impracticable. The po'o-uli did not allow itself to be followed around. It excelled at remaining inconspicuous.

The day on which, at twelve years old, I woke up with stomach pains to be operated on that very evening for an inflamed appendix, two researchers in the wettest part of the Hawaiian rainforest experienced the birth and death of a po'o-uli. It was May 1986.

Astonished by what they were seeing, they forgot to turn on their film camera, so there were no pictures of the event.

A first nest with two eggs was abandoned after seven days of nonstop rain. In the second nest, one chick survived of the two eggs. The researchers wondered why the po'o-uli was insisting on building a nest here, in the wettest part of the rainforest, one of the most rain-drenched places on earth, until they realized that the po'o-uli might not have made that choice, that it preferred drier parts of the forest but had been driven into this inhospitable bit by humans, mosquitoes and rats.

The day on which the only po'o-uli chick ever to be seen stuck his head over the edge of the nest and the researchers once again forgot about their camera, there was blood in my underwear and the surgeon on duty had to admit that this sometimes happened to girls of my age, that a first menstruation could be mistaken for an inflamed appendix. But never mind, he cheerfully slapped my knee, you won't miss that little bit of intestine, will you?

That summer we all sang J'aime la vie. In the years that followed I fell in love, broke my heart over oil slicks on the beach, broke my heart over a nuclear disaster, broke my heart on seeing the rainforest

burn, stopped eating meat – apart from that one Bicky Burger which a friend told me didn't have any meat in it – broke my heart over a lost love, studied history, fell in love again, moved to France for a year, cheated on my lover, promised in tears that it would never happen again, dreamed of writing and became a journalist, took a new lover, had misgivings, allowed him to convince me, and when he moved abroad we stayed together for a while by living far apart.

In those twelve years, fences were erected around the po'o-uli's habitat to keep out pigs and goats; people killed the pigs and goats inside the fences, scattered poison to wipe out the rats, hunted for the po'o-uli, found hardly any and started to fear that if the bird wasn't saved now it would be too late.

The day on which the editor-in-chief called me to his office, closed the blinds, pushed me into a corner and forced his tongue between my tightly shut lips and into my mouth, which was his way of welcoming female newcomers to the editorial department, in the wettest part of the Hawaiian rainforest a man held a po'o-uli in his hand and slipped a ring onto its leg.

It was 1997. Of the six that had been counted a year before, only three were definitely still alive, spread over three areas, called Home Range 1, 2 and 3, which were too far apart for the po'o-ulis to meet, form pairs and breed. To prevent their extinction, it was noted in reports, the birds were about to be forced to move house, forced to fall in love, forced to have young. They had no choice. Individual likes and dislikes now counted for little when set against the survival of the species.

In the years that followed I met the man of my life, whom I'd known until then only as my ex's best friend. Meanwhile, in the wettest part of the Hawaiian rainforest, the po'o-ulis, each in their own Home Range, were growing older by the year. Absorbed into clouds of other birds, they forgot what it meant to be a po'o-uli. While I suppressed love and the man of my life became a father for the second time, in Hawaii all the reports were finally written, studies completed, documents signed to permit catching the po'o-uli in Home Range 1 and moving him to Home Range 2 in the hope that he'd want to stay there and would attach himself to the female. It was 2001.

Preparatory tests with a different bird, the less endangered Maui creeper, had shown that barely twenty-four hours after the move, the bird was already on its way back to its former home.

The day on which the man of my life left his wife and rented a house on the edge of the city where I lived, so that not long afterwards I could move in with him and his two young children, in the wettest part of the Hawaiian rainforest a female po'o-uli was caught, tagged, taken in a cage to a different part of the forest and released there. It was 2002.

At nine o'clock the following morning the radio signal indicated that the female was awake, active and flying homewards. Operation translocation had failed. With three birds left it was time for the last emergency measure: catch them and encourage them to copulate in captivity, lay eggs and hatch them out.

The day on which I filled in the obligatory questionnaire that precedes a first deep-sea dive and ticked 'no' next to 'Are you pregnant?', in the wettest part of the Hawaiian rainforest a female po'o-uli was plucked out of a mist net. The first thing to be noticed was that the bird was missing one eye. It was the autumn of 2004.

As protocol required, she was put into a soft cloth bag, taken to base camp and flown by helicopter to the Maui Bird Conservation Center. 'The bird is calm and immediately began eating,' noted Rich Switzer, the man in charge of the centre.

The bird was weighed, assessed and inspected, and as a result it was decided that what had been taken for a female was actually a male, that he was at least eight, perhaps nine years old and that he had malaria. Now that one po'o-uli had been captured, every possible effort was made to catch the other two.

The day on which I looked at two stripes on a pregnancy test, a second or third po'o-uli had not yet been caught after three weeks of trying, and so the fear grew that the bird in the cage was not the last of three but the last of his species. It was still the autumn of 2004.

Even the captured bird was not doing too well. He had difficulty taking off and preferred to crouch under the heat lamp that hung above his cage. He was given antibiotics and a fungicide, and drip-fed. A hand towel was folded to make a ring-shaped nest to support him.

The day on which the midwife moved the cold ultrasound wand over my lower belly and we heard our child's heart beating as if a wild foal was galloping across the room, Switzer went out at eleven thirty at night to see how the po'o-uli was doing. He was sitting upright in the towel, his head leaning forwards slightly, his one eye wide open. He was dead. It was still the autumn of 2004.

Switzer swallowed, but he too strictly followed protocol. He laid the bird in the freezer, ordered a courier service to take the body the next morning to the San Diego Zoo and sent the required emails.

'We are always sad when we lose a living creature. Now we have lost not just a bird but an entire species.'

Organ failure was given as the cause of death. Further research showed that the bird's testicles were inactive. The male that had been intended to save the species was infertile.

The day on which we first saw our eldest son on the ultrasound scan and took home the printout of that hazy black-and-white image as treasure, geneticists grew living cells from the skin of the po'o-uli and stored them deep frozen as the last remains of the species in the endangered species collection of the San Diego Zoo. It was still the autumn of 2004.

The day on which I became a mother, the weather was stormy and I looked through the window of the delivery room at trees sweeping recklessly back and forth while on the advice of the midwife I turned from my left onto my right side, at which point our son's heartrate took a deep dive every time. He was a stargazer and I had to keep on turning, until he turned with me. It was May 2005.

In the Maui Bird Conservation Center, Switzer was asked what could have been done differently and better in the race to save the po'o-uli. Two things, he said. One: he didn't want to be remembered as the man in whose hands the po'o-uli died and two: don't wait. We ought to have collected eggs when that was still possible and put them into the incubators to raise a new generation of po'o-uli.

The night in which I stayed awake, with eyes only for our son, who pressed again my breast like a snuffling animal, and I wondered what kind of world he would grow up in, there were thirty years between the discovery of the po'o-uli and its extinction. Now it's believed that he belonged all along to the generation of the living dead, the generation that continues in existence as a zombie population whose members live to a ripe old age but never succeed in raising young.

You still see them, until you see them less and less and the last of the species succumbs.

Lapwings live to be old. On 15 April 1998, feedback was received from a ringed lapwing in Thiès in western Senegal. He'd been picked up from the ground dead. Twenty-four years earlier he was ringed as a youngster in Deurne in the Dutch province of Noord Brabant. How many young this lapwing produced we don't know. Perhaps 192, 96, 24 or 17. Any of those would be good. Only fewer than 12 would be regarded as problematic.

On a scrap of paper, Marc did the simple arithmetic of species conservation. To keep the population up to the mark, a pair of lapwings must raise 0.7 young every year, or to use a round number, one every two years. With four eggs per nest and the bird's great diligence in starting again if a nest fails, this seems perfectly achievable.

They are no longer achieving it.

Marc sees chicks more often dead than alive. Squashed on the road, crushed by agricultural machinery, parched in a heatwave, starved for lack of worms and insects, poisoned after pecking too many maize kernels that were soaked in neonicotinoids. The list of threats is growing more quickly than the chances of their survival. Victim of intensification. Victim of climate change. Victim of excess nitrogen. The lapwing is gradually becoming all of these.

Lapwings not only grow to be old, they have good memories.

'Sometimes,' says Marc, 'it's as if you can see them thinking: totally pointless. Yet another nest has been ploughed up, a field sprayed with glyphosate, and they strut about despondently, mating listlessly; I feel their pain, their sorrow, which are also my pain and my sorrow, and then I wonder: can birds suffer from burnout?

The longer it goes on, the less he can bear it.

– I used to enjoy watching birds. Now it's a permanent grieving process.

If lapwings grow old and have good memories, do they grieve too?

Dutch nature photographer and documentary maker Danny Ellinger is convinced that they do. We're sitting in a little boat that he steers adeptly along the channels between stretches of boggy grassland. Above our heads, planes are beginning their descent to Schiphol Airport. On the horizon, cars rumble past on the ring road. What Danny calls the ancient biotope of meadow birds is a lost bit of land, hemmed in by industry, blocks of flats, an airport, a cloverleaf motorway junction and paths for dog owners. When he came to live here in the late 1980s, he didn't know where to start. Black-tailed godwits, redshanks, lapwings: they all belonged in the top class. Now their numbers have fallen back here too, and he knows individual birds by the names that he's given them.

Black-tailed godwits go through a prolonged mourning process: that's something he learned from a female he named Grieving Widow. Three years ago a stoat robbed her nest, biting her husband and two chicks to death. Since then she hasn't deigned to look at a male; she refuses to copulate, to lay eggs, to do what godwits are supposed to do. She migrates with the others, returns with the others and stands and stares year after year at the same place, a heap of soil in the reeds, unmoved by all the activity around her. What she doesn't know is that her husband and children still exist as facsimiles on Danny's mantelpiece. He took them home and then to a taxidermist. Sometimes he wonders what would happen if he were to position the lifeless creatures next to her in the reeds.

'Fairly hopeless,' Danny frankly describes the situation the meadow birds are in. 'Technically we can guard them against extinction in this area. But then who or what are we saving?' Danny is talking about all the measures currently being taken. The bamboo canes planted in the fields to mark nests and alert farmers to the need to manoeuvre carefully. He calls the canes lures, since they bring

crows and foxes, clever animals well aware of what the markers mean. Or people. Because the fewer lapwings there are in the wild, the more people like to keep them in aviaries as near-rarities.

The boat moves on. We approach a black-tailed godwit, coming within arm's reach, and with our chins resting on the side of the boat we peer through the stubby stems, feeling like voyeurs when in front of our eyes a male godwit displays all his erotic talents.

So how about collecting eggs and hatching them some distance away? Danny thinks that's completely insane. Okay, you can keep the lapwings going for a while like that, but what kind of creatures are you breeding? Birds that have never pulled a worm out of the ground and then will suddenly have to? Most importantly: you can hatch as many eggs as you like, but if the landscape isn't up to par, if you don't drastically change the agricultural system by using less fertilizer, less poison, less drainage, less tillage, it's a complete waste of time.

Sometimes Danny thinks we should now say goodbye to the lapwing. If one lands on a maize field, the best protective measure is to chase it away. The species has a broad distribution, living as far off as China, and what can no longer happen here may be possible there.

He knows one thing for certain. We've screwed up. We've waited too long.

Lapwings grow old. Until they die and are no longer there.

Be vague. That's the task of several members of staff at the crane breeding centre in Patuxent in the United States. Every morning each of them dons a white suit with black gauze in front of the eyes. They disguise themselves as hazy white clouds and spend their days keeping as quiet as possible.

They silently lift the newborn chicks out of the incubator.

They silently hold a wooden crane's head on a stick and show the young how to peck for worms.

They silently take the young cranes for walks, let them paddle, encourage them to dip their heads in the water and familiarize them with the ultralight plane that will accompany them on their migration route.

The only sound comes from a loudspeaker they carry with them that emits the low honking of adult cranes. Apart from that, they erase themselves as people to make the young as far as possible become cranes. Between these erased people, debates sometimes arise about how much they should copy the behaviour of cranes. Should they stride like waders, or can they walk like the two-legged mammals they are? What they want to avoid above all is letting birds that have never seen an adult whooping crane get attached to humans, or develop a sexual preference for walking smudges of white.

These birds, born in captivity, need to become wild, so the people in shapeless suits are trying to teach them how. In 1942 there were barely twenty whooping cranes left. In 2000 they migrated in large numbers from Florida to Wisconsin for the first time in a hundred years. They flew behind an ultralight plane piloted by a man in a shapeless white suit.

The story of the whooping crane in the US is the story of many creatures that were once plentiful, until they suddenly found themselves on the verge of extinction. Their survival ultimately depends on forced and controlled reproduction. Which amounts to a life centred on ejaculation stimulated by human hand – for sperm collection – and then artificial insemination after which, if it's successful, the young are quickly removed so that another controlled insemination can take place.

For every Pyrenean ibis, whooping crane or northern bald ibis released, a shadow population of farmed birds is forced to sacrifice itself for the preservation of the species. But that life of sacrifice is no guarantee of the preservation of their environment. Because, as the critics say, who and what are you saving if the degradation of biotopes, habitats and ecosystems doesn't stop? And what if breeding programmes become an end in themselves? A lucrative money spinner? Since the Chinese government started sending pandas to zoos all over the world in the 1990s to produce baby pandas,

more pandas have been caught in the wild than the number released. Not a single baby panda has ever left his or her cage. It's unclear whether this is because young pandas are a magnet for visitors or because they're incapable of surviving in the wild. Captivity changes you.

Ghostlike people can teach birds a lot, but how do you teach them to duck away when danger threatens? How do you teach them to live as whooping cranes if you're not one yourself?

Whooping cranes brought up by ghosts continue to find it harder to raise young themselves. The hundreds that have been hatched, taught to eat, walk, fly and migrate, have produced barely three young. The fear is that they have no idea what it means to care instead of being cared for.

'Gardening in the ruins' is what Australian extinction biologist Thom van Dooren calls captive breeding programmes for endangered species: 'A practice of care that aims to nourish and sustain species and their living participants in far-from-ideal conditions, where the most desirable options simply are not available.' It's a way of preserving species, technically, from extinction.

In the summer of 2024, biologist Johannes Fritz and foster mother Barbara 'Babsi' Steininger flew for the seventeenth time in a bright yellow plane from Austria to Vejer de la Frontera with a string of bright pink Pyrenean ibises flying behind them. Fritz and Babsi did not take the trouble to disguise themselves, nor were they silent: 'Come, come, come, Waldi!' Babsi chanted through a megaphone.

These birds too were once commonplace. Their environment too has been largely destroyed. Meanwhile Fritz announces proudly that he's released a total of three hundred birds into the wild. Every year he migrates with them. Up to now there's been nobody else who can teach them how.

Collecting lapwing eggs is forbidden. You're only allowed to remove them temporarily while a tractor or sprayer passes and then put them back. But what do you do when you see the farmer approaching, high in his heated cab, deaf and blind to what's happening under the wheels of his tractor, the lapwing parents flying around your ears wild with panic. If you can't stand it any longer and you know someone who has an incubator, surely you think: what does it matter, it's surely worth a try? We're only human, after all. We can stand only so much suffering right in front of our eyes, beneath our hands. It takes no time at all. Four eggs in a basket and it's done. But where do you go when the eggs crack and chicks clamber out?

When the man with a cardboard box containing ten lapwing chicks turned up at the door of the animal rescue centre, the staff had no option but to take the box from him and attempt to legalize the crime.

A pilot project was set up that allowed an exception to be made to the species legislation. Under strict conditions, eggs from doomed nests could be gathered if they were then handed over to the rescue centre, the only place qualified to breed ex-situ from the eggs of lapwings, curlews, redshanks, godwits and oystercatchers. There were precedents. It had been tried elsewhere. In 1994, in Fugelpits Moddergat in the Dutch province of Friesland, four black-tailed godwits and four lapwings were bred and released. The first godwit was found a year later, in France. Shot dead by hunters. The rest lived for another two, three, five and seven years respectively. One of the three curlews that hatched in the rescue centre in 2022 was likewise shot in southern France during migration. A second fell prey to a hawk within a week. Of the other curlew, released a year earlier, the eggs too are now in the incubator, three years later. Nothing has been heard of the fifty lapwings released over the past three years.

I carefully relax my grasp. The wind is picking up, howling between the houses up against the dyke, blowing wildly to expose the skin of the bird, and in my mind I see my grandmother's lightning-fast fingers plucking the chickens she'd just slaughtered. As mercilessly as her hands pulled at the shafts of the feathers, the wind tugs at the feathers of the bird in my hand. I wonder where this bird that has

never flown will end up. Strong winds, storms and hurricanes often carry birds to strange places. In December 1937 a fierce easterly blowing out from the shore carried a flight of lapwings from England and Wales over the Irish Sea, across Ireland and over the Atlantic Ocean to Newfoundland, where people rubbed their eyes on seeing a hundred lapwings scurrying about among the bare stalks of the harvested maize.

Now that climate breakdown is increasing the power of hurricanes, birds fail to fly against the wind more often than before and are blown off course. In the tail of hurricane Lee, a record number of American songbirds became stranded in Britain. The phone at Rare Bird Alert rang nonstop and traffic congestion developed as birdwatchers thronged to see with their own eyes the bay-breasted warbler, the magnolia warbler and the Canada warbler.

A memorable day in the history of British ornithology, it was called. But the birdwatchers were focusing their telescopes on the living dead. The odds of those songbirds still having the strength to fly back were negligible.

I press my lips to the little bird's head, wanting to say something more, but can't find any words. What do you say to a lapwing that needs to find its place in this world?

He gives me a nasty peck.

I let go.
