

Chile | Helicopters bring the remote but trout-rich glassy waters of the Andes within easy reach. By **Ruaidh Nicoll**

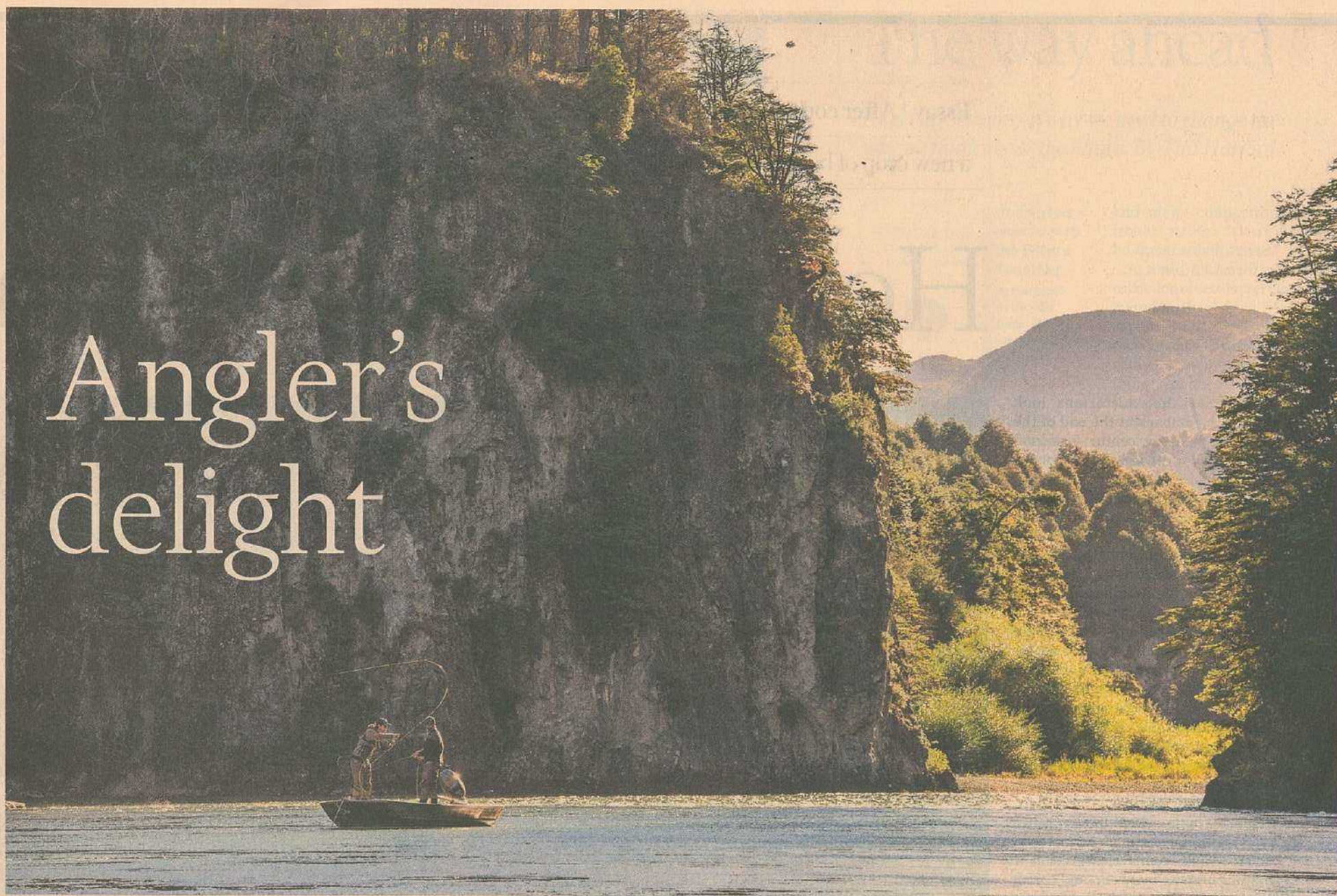
**M**ountains are crumbling around us, in vast rock-falls that leave the trees shattered below. Waterfalls crest the tops and drop seemingly for ever before exploding on the surface of the lake.

"On a calm day the water is so clear you can see fish waiting there for food," says Fernando "Nano" Abarca, but there's nothing calm about today. A waterfall bends and twists like a ribbon in the wind and our boat heaves and yaws on the waves.

To get to this place we flew into the small Chilean town of Chaitén, ash from a 2008 volcanic eruption still thick on the ground. Then we drove for three hours, passing through Villa Santa Lucia, where two years ago a mudslide killed 18 people, its path still awesome and terrifying.

Now we pull close to a rocky shore, Nano manoeuvring the Hyde power drifter by its oars, and there, in a sheltered inlet, the water settles. We see a brown trout hunting in the glassy water and my friend Darrell casts towards it. The fish swims up and sucks the fly in, but when the rod is lifted, it's gone.

I look around. This is where Patagonia begins, and here the Andes feel like they are still forming, which I suppose they



are. We are staying at Rio Palena, the latest lodge from the money-no-object

in the correct sizes. If it was winter, it would have been filled with ski kit. Soon we're jetting between banks of forest so thick they could hide Sleeping Beauty. We arrive in a high-walled gorge where, too tired and too excited, I make a hash of casting. Back at the lodge, I wander off down the river to fish on my own and find my balance.

It begins to rain, but the southern spring daylight refuses to give out, and I catch a few trout. Walking back through the dusky grounds, I look for a hut of newly hewn wood, where a South American *asado*, or barbecue, has been set up.

A thick poncho is put over my head. A glass of carménère is handed over and I'm directed to a fire pit where a side of



Clockwise from main: casting in the Palena river; the Rio Palena

could come. He wanted a programme where everybody could do what they want, but where they would all bump into each other. So, say, he could fish but

years clearing the forest. They were so isolated, provisions would take months to arrive." Change came only in the 1970s when the army began building the Austral highway.

My attention is brought back by a waterfall plummeting from a high cliff and spraying outwards from a smooth rock Nano calls the elephant foot. We pull into a shingle bay where Ryan, another member of the group, hooks and loses a fish Nano claims was as long as his arm. Ryan seems a little stupefied, so we stop for lunch — quinoa, *pebre de cochayuyo* salad and garlic shrimp served in tiffin tins and washed down with Austral lager — while Nano tells us about the hiking trails he is developing.

Salmon Fund, tells me: "He's the real deal."

It's not all about cash though. "We just met with a farmer who asked that instead of paying a fee, we used his lamb in the kitchen," Griff says.

Which brings me to dinner. The evening meal is served at a single table of walnut, beside a fire, usually after pisco sours drunk in one of two wood-fired hot tubs that sit under the coigue. The meals are simple, and delicious — crab, smoked pork ribs, chicken and shrimp, tiramisu, accompanied by Chilean wines. Afterwards there's a pool table and board games, a bar open until 2am, but we are long gone before then.

The rooms at Rio Palena call like



adventure tour operator Eleven Experience. Eleven has, among other properties, Taylor River Lodge in Colorado, Chalet Pelerin in France and, perhaps most famously, Deplar Farm in Iceland. In the outdoor-pursuits world, Rio Palena is as hotly anticipated a newcomer as I've known.

The company was created by Chad Pike, a senior managing director at investment firm Blackstone. He has employed the best guides in the most far-flung spots to take him (and guests) skiing, hiking, mountain-biking, fishing and rafting. The lodges are luxurious and often compact, so families can rent the whole place.

Pulling up for the first time, we're faced by an elegant, low-slung dark pine house, settled among *coigüe*, a type of beech. Inside a fire is burning in a huge stone hearth in front of sofas sporting thick fabrics, on floors of shining oak. One of my fellow travellers has found the bar and shortly afterwards a pisco sour.

Out of the window, across a meadow where the lodge's helicopter sits, are the wide, faintly glacial green waters of the Palena river. I ask Gustavo Rudolphi, the general manager, if I can go fishing. "Most people like to relax after two days of travel," he tells me. "But if you want to, of course."

In a basement kit room, I'm assigned a nook. Here is the clutter of fly-fishing — the waders and boots — but also a dry suit if I fancy white-water rafting, a dry bag, and gear for any activity I may have previously expressed an interest in, all

lamb is cooking to melting tenderness. I settle back, amid music and flowers, to drink and eat while a couple dance.

The next morning, with clouds swirling around the icy peaks of the mountain that rises sheer from the far bank of the river, I sit on the deck and talk to Jack "Griff" Griffiths, a Welshman with the look of Rhys Ifans playing Davy Crockett. He tells me he had been working as a ski instructor in France when he heard some 11-year-olds needed a guide. "I turned up in a penguin outfit," he says. "I think they liked that."

One of the parents was Eleven's owner, and shortly afterwards Griff found himself on a plane to the company's headquarters in Colorado. Since then he has been developing children's programmes across all the properties.

"Chad has four kids. He said to me that it's cool going on all these adventures, but it would be better if the kids

Lodge; the wood-fired sauna at the lodge; comforts at the lodge include a huge stone hearth

#### I / DETAILS

Ruaridh Nicoll was a guest of Eleven Experience ([elevenexperience.com](http://elevenexperience.com)) and Latam ([latam.com](http://latam.com)). An eight-night trip costs from \$7,350 per person, including six days of guided fishing, one-day of heli-fishing, all equipment, full board and drinks. Latam has direct daily flights between Madrid and Santiago



the kids could white-water raft and they would meet on the river."

The rewards for people like Griff are obvious. Alan Bernholtz and Drew Daley, two of the most senior guides, spent the winter in Rio Palena drawing up new heli-skiing routes. In the months before the lodge opened they flew out daily in the helicopter to discover trails, drop in communication equipment, and look for lunch spots.

I'm called away, and after a half-hour drive along a dirt road, our Hilux turns off into a pasture of wild roses and through a stand of *coigüe* before the Palena shows. Nano is waiting with a very fancy NRS fishing raft. We push off into the stream, spinning like a leaf in the current, rushing through rapids and then dawdling through placid pools.

I cast under the trees, or else on to the foam lines in the stream, and silver fish dart up to take the bait. Brown and rainbow trout, from tiddlers to five pounders, fight furiously once hooked but are soon released back into the river again.

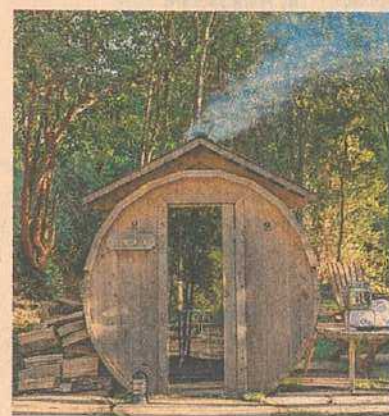
Until the end of the 19th century this was a wilderness, the forests too thick to break through. You have to go down to the sea, an hour's drive away, to find marks of the ancient indigenous communities. They were waterborne nomads called the Chono, who left small rock walls, shell middens and little else.

Five settler families arrived in Palena via Argentina in 1929. One of Eleven's staff, Aarón Sepulvedo, tells me his grandmother, who has just turned 100, was one of them. "They spent the first

about the hiking trails he is developing. "My favourite is one where you hike for an hour and a half through the rainforest and you reach a waterfall that's maybe 100m high. The cliff curves inward and you get soaked — sometimes it's so powerful you can't get close — and there are always rainbows."

Nano has been negotiating access with the farmers, usually over their homemade cider. Some like the new tourists, others don't. Griff explains how important the personal approach is. "We're flying a helicopter, so we have to do something radical to offset that."

This chimes with Pike's burgeoning role as a philanthropic conservationist, transport options notwithstanding. He's been pouring money into projects around the world to help preserve species of threatened fish and their environments. Robert Sloss, who chairs the Migratory Salmon Foundation and has worked with Pike on the North Atlantic



sirens even if, unlike other sporty trips, there is no pressure to get up early. With no shut-off except the failing light, why start at six? I wander in for a relaxed breakfast at eight — yoghurt, granola and whatever eggs I desire.

Later I'm joined in the front of the helicopter by Gabriel Perat Koncilja, a former Chilean navy pilot. "Don't pull that lever," he says. "It ejects the door and they are expensive." We lift up, the lodge wheeling off below. "This is an AS350, the type of helicopter that went to the top of Everest," he says with satisfaction.

We head off down the valley, banking sideways to pass a vast rockfall. A new valley opens up below, and with it, a vertiginous drop. It's a landscape of creation; dinosaurs would seem at home. At one point we chase a grand rainbow through the mountains.

Gabriel drops me by a remote mountain lake, where Arturo Saffores Vazquez, another guide, has set up a raft. Gabriel makes a joke about fishermen's tall tales, and settles back with a book, while Arturo rows me around the edges of the lake.

The wind is blowing and he shows astonishing strength and resilience to keep us in position. I hook a big brown trout, dark as woodsmoke. It runs and jumps but then Arturo expertly nets it and it's released back into the depths, unlikely (it'll be pleased to know) ever to meet mankind again.

I lean back and look up. There, circling above me is a condor, vast in the stormy sky.

For pilots, each season presents its own technical and meteorological (not to mention packing) challenges. But it's winter operations that I find most interesting.

The most important task before departure is to ensure our aircraft — in particular, its wings, tail and engines, and myriad ports, sensors and vents — is free of frost, snow and ice. A pre-flight visual inspection is critical because the conditions that can result in "frozen deposits" aren't always as obvious as falling snow. For example, an aircraft parked under blue skies may have taxied through slush after its previous landing.

When I was training to be a pilot it was common to find thick frost on the wings after bone-dry autumn nights — and that was in Phoenix, Arizona. Most surprising is the "cold soak": after a dozen hours in the icy reaches of the atmosphere, the chilled wings of a just-landed airliner can gather frost even in T-shirt weather.

Frozen deposits have the potential to disrupt the well-coiffed airflow over wings and through engines, and must



Mark Vanhoenacker

#### View from the cockpit

be removed. Back in Phoenix we'd rotate the wings, one after the other, toward the newly risen desert sun.

Airliners rely on more sophisticated methods, and when there's any possibility of new accumulations before take-off — for example, it's actively snowing — then de-icing is followed by anti-icing, a one-two punch that provides protection for a specified "holdover" period. De-icing and anti-

icing involve an operative — whose radio call sign at many airports is "Iceman", inevitably — spraying one or more expensive, high-tech and sometimes heated fluids on to the aircraft. Holdover times vary with the temperature, the type of precipitation and even the material the aircraft is made of (traditional aluminium, or a newfangled composite, as on the Boeing 787). Under moderate rates of snowfall, at minus 4C — par for the course in Montreal, say — a typical two-stage treatment might provide 45 minutes of protection.

Even much more benign conditions require winter precautions. For engines, "icing conditions" are usually defined as 10C or lower in the presence of any visible moisture, which includes snow, of course, but also mere puddles on the taxiway. (Why use 10C? It's a conservative, tried-and-tested figure that accounts for temperature variations around exposed engine surfaces.) The unpainted inlet (the lip around an engine's front opening) can be heated to prevent or remove ice, but redirecting or "bleeding off" even a little of the engine's energy requires us

to calculate a higher power setting for take-off. On the upside, colder air is denser. So wings generate more lift and engines produce more thrust (that's why departures from very hot cities were once often timed for the relative coolness of the small hours).

Winter operations become simpler after departure — a general truth about aeroplanes, which are, after all, most at home in the sky. Many probes and sensors are continuously heated. On some aircraft, engine anti-icing may be



A jet engine's unpainted inlet can be heated to prevent icing — Jan-Louise Haller

activated automatically, by vibrating ice detectors located near the nose. Portions of the leading, or front, edge of the wings can also be heated. I find it remarkable that only the leading edge needs such technology: generally speaking, moisture caught in moving air doesn't actually touch the rest of the wing's surface. Another surprising consequence of cold weather: if fuel gets too cold, a checklist demands we descend to warmer air, or accelerate, because at nearly supersonic speeds the effect of even very cold air is to heat, rather than cool, the wings.

Arrivals in cold weather are often more straightforward than take-offs. But for a descent in truly freezing conditions, an otherwise marginal consideration becomes important. Altimeters sense air pressure, which decreases as altitude increases. Think of layers stacked in the atmosphere — imagine shimmering surfaces, each like that of the sea — that correspond to 90, 80 and 70 per cent, and so forth, of the full pressure at sea level.

Barometric altimeters convert pressure layers into the altitudes that pilots follow across the sky. When air is

hot, it expands, as many things do when warmed. The layers therefore puff upward a bit and every plane flies a little higher than its altimeters indicate. In the opposite scenario — in the depths of a Russian winter, say — the cold air contracts, the pressure layers draw down, and altimeters will instead slightly over-read. That's not acceptable, so in very cold weather we calculate (yes, there's an app) and fly at slightly increased altitudes. We even artificially raise the heights we use for nearby mountains, to maintain the same safe height above them.

Of course, none of this applies if we've swapped hemispheres and seasons, donned our sunglasses, and are preparing for a morning touchdown in a city — I'm thinking of you, Cape Town — where no one on the radio answers to the call sign "Iceman" and where the snow drifting over the lights of the previous night's departure runway seems very far away.

Mark Vanhoenacker is the author of 'Skyfaring' and 'How to Land a Plane'. He flies the Boeing 787 for British Airways. @markv747; mark.vanhoenacker@ft.com