ANATOMY **OF A** SEARCH

Search and Rescue is a service we hope we never need. Caro Ryan, who has worked for two decades as a land-search volunteer, gives us a fictional account of how a search effort might typically unfold.

Words Caro Ryan

This story is a work of fiction, but based on Caro's 19 years of actual search jobs.

ATURDAY 8:38 AM

The headlights of the Subaru Forester work hard to cut Through the mountain mist as Dave turns off the bitumen. Dropping his speed to avoid kangaroos and potholes, the moment brings back memories of long-past adventures, before the claustrophobia of pandemic restrictions and bushfires had forced him inside. This is it—it's time to get out.

Pushing further away from the city in his mind, he passes through the patchwork quilt of radiata pine, making several turns along logging trails, before crossing the invisible boundary into the national park. It's years since he's been here, and although things don't exactly reflect his memory, he puts it down to newer or re-routed roads, along with the fog of years.

Forty minutes along the dirt, he comes to a barrier, standing proud in an attempt to stop 4WD weekend warriors chewing up the park. "It's no wonder the trip took longer than I remember given the state of the road," he thinks to himself. He doesn't remember the barrier being here, but hey, a lot can happen in five years.

He peels himself out of his car, body stiff from the long drive, and breathes deeply. Turning to face the light, he closes his eyes and feels the rising sun's warmth on his face. A kookaburra's call breaks the silence.

This is going to be an epic weekend.



WHAT MOST DON'T REALISE IS THAT THERE'S A TEAM OF PEOPLE BEHIND THE SCENES, SUCH AS DETECTIVES, FORENSIC INVESTIGATORS, RESEARCHERS AND ANALYSTS WORKING TO HELP FIND SOMEONE."

WEDNESDAY 6:45 AM

I know it's bad to check my phone first thing in the morning, but I can't help it—it's a habit borne from nineteen years as a volunteer in land search in NSW's Blue Mountains. And given that I'm now responsible for 45 volunteers between the Nepean River and the South Australian border in Bush Search and Rescue (BSAR), a specialist unit within the NSW State Emergency Service, checking my phone first thing is important.

Oh, and it's a Wednesday. Most of our call-outs come on Tuesdays or Wednesdays.

Sure enough, there's a missed call from Sergeant Dallas Atkinson, Coordinator of Police Rescue in NSW's Blue Mountains, a man who has been wearing the white overalls for sixteen years.

My heart quickens as my waking eyes struggle to focus. An early-morning call from Dal means one thing: There's a job on. In an instant, my plans for the day disappear. I sigh. *Here we go again*.

A million thoughts run through my mind: a priority list of questions and logistics, procedures and policies. Behind each one, the shadow of humanity, a name, a story and a family I'm yet to be introduced to.

Quickly scrolling through my notifications, I find what I'm looking for: an SMS from the rostered BSAR Duty Officer sent via SES software called *Beacon*. This web-based app registers all jobs that come through the SES call centre in State HQ, along with direct messages from other emergency services via ICEMS (Inter-CAD Electronic Messaging System).

The message reads:

"BSAR STANDBY BLUE MTS and GREATER SYDNEY, search for missing bushwalker Blue Mts. Reply if available next 3 days to Duty Officer. Overnight SOPs, day search also available. Standby for activation."

SATURDAY 9:50AM

Dave steps away from his car and pushes into the scrub—it's thicker than he expected.

Before the chorus of his ear-worm song, Queen's Under Pressure, has finished, he finds what he thinks is the spur leading down into the exit of the canyon he'd done with Matt and Phil five years ago. That was the trip they'd found a huge island slab of sandstone that glowed orange under the setting sun. It was here they sat, shared a joint and watched Venus appear. The three talked about their hopes, dreams and everything that was to come after their upcoming uni graduation. It's a spot Dave has long said he wanted to return to and bivvy for a night. Now, at last, he is on his way back.

He continues for what feels like a couple of hours; without a watch, it's hard to tell. Surely, that rock slab is somewhere around here? He presses on, regardless of the rising, niggling doubt starting to lurk in his stomach. Pushing it away, he focuses instead on the joy of being in the bush. Then he hears the sound of singing water below, and—keen to fill his water bottle—he pauses in a saddle before heading down into the gully.

"Maybe after a break," he thinks, "things will be clearer. I'll be able to work out where I am."

As his eyes adjust to the dense canopy, Dave is struck by the beauty of this hidden world: The transition from classic dry sclerophyll forest to coachwood-topped rainforest, laden with a rich green filter. He grabs hold of a tree to steady his descent. A few drips from the previous night's rain hit his face. Then he takes a step, avoiding the moss-covered rock, and treads instead on a wet, grey boulder.

The boulder moves, then dislodges.

Dave is instantly propelled, pinball-style, down the narrow, steep gully. Spurred on by gravity, he tumbles and bounces the way bones and flesh aren't designed to, and he registers the sound of snapping as being that of broken branches—not the broken bones that they actually are. Ragdoll limbs try in vain to arrest his fall, only managing to nudge more rocks and vegetation along for the wild ride. Meanwhile, the soundtrack of Queen never stops. Under pressure ...

Suddenly, there are no more rocks. Dave is free-falling, and he sails past the life-giving waterfall he was seeking out.

MONDAY 3:46PM

The phone rings at Katoomba Police Station.

"Umm, I'm a bit worried about one of my employees, Dave Gill. He hasn't shown up for work today and I've tried to call him three times. The thing is, this just isn't like Dave. He's super reliable, always on time. He told us he was heading up to the Blueys, and I can see some shots on his Instagram account from Saturday morning, but now I haven't heard from him. I thought I'd contact you guys to see if you'd heard anything."

Dal and the team at Katoomba Police get to work. But there's no point in activating a search yet without a Last Known Position (LKP). The Blue Mountains are represented on Google Earth by a massive, brooding slab of dark green. Sending volunteers out now would be a search for the proverbial needle in a haystack.

Besides, they haven't yet determined if Dave is even missing. So instead, they start by contacting Dave's next of kin from his HR records. Unfortunately, his mum hasn't spoken to him in over a week, and didn't even know he'd gone to the mountains. She gives them a name of a mate he'd been canyoning with back in his uni days.

SATURDAY 11:10AM

Dave hits the deck. Oomph.

Lying crumpled on a small beach at the base of a waterfall, Dave blinks away grit and dirt, struggling to open his eyes. He turns his head slowly to see an image of intense beauty: a lost mountain cascade, tumbling humbly over a four-metre waterfall. Is this life, or is this heaven?



Then the intense pain begins crushing him. Each breath is searing. His stomach has gone rock hard. The taste of blood is in his mouth. But realising all this means some level of cognitive awareness. "I'm alive," he tells himself.

Willing himself on to the question of what next, he tries to move. Agony grips his body, sending waves of nausea washing over him. His right leg and shoulder seem to be the source of the pain, along with every breath. He can't bear to move. The cold from wet sand starts to push through his clothes.

And then it dawns on Dave: No one knows where he is.

"Fuck. What a fucking idiot," he thinks to himself as the cold fingers of despair take hold, removing the initial relief of survival. A tear of realisation forms in the corner of his eye.

Regret is a bitter, bile-tasting cocktail, and Dave drinks it in. He envisions his backpack—up in the saddle at the top of the gully above him—along with the non-existent PLB his mum had offered to buy him (which he'd refused). He mentally writes the simple text—the one he didn't actually write—to let someone know where in the Blueys he was headed this weekend.

The warm tear on his cold cheek gives no comfort.

WEDNESDAY 6:50AM

Despite not knowing yet where to start searching, the SMS alert I've received serves a critical purpose: All positions within SES Bush Search and Rescue are voluntary, and the alert gives us volunteers time to get ready, to seek permission from employers, postpone meetings, check our gear, arrange school pick-ups—all the things we need to plan so we can step away from everyday life and try to bring a missing person home, hopefully unharmed.

But volunteers aren't the only people involved. Over the years,

I've come to appreciate the two sides of a search: *the seen* (the search base or forward command post) and *the unseen* (investigation, planning, logistics). While everyone is familiar with media images of uniformed volunteers from SES and RFS, and police and ambulance officers fronting the cameras at press conferences—clips like these first drew me to become a volunteer—what most don't realise is that there's a team of people behind the scenes, such as detectives, forensic investigators, researchers and analysts working to help find someone.

Those unseen elements are critical. The better they are, the quicker the actual search. And because the first 48 hours in a missing-person case are the most crucial, everything is a race against time.

MONDAY EVENING AND TUESDAY

Dal's team look into Dave's social media accounts to find only generic shots of scrub tagged simply as 'Blue Mountains National Park'. Perhaps the vegetation types will point somewhere? They contact NPWS to ask the question and to alert their field staff to be on the lookout for his car.

In Sydney's Inner West, detectives visit his flat and find an empty La Sportiva shoebox with a recent shop receipt. Telstra is also contacted to help with phone data, Westpac to check for recent transactions, and Transport NSW to see if his Suburu has passed the cameras on the Great Western Highway. All this investigation takes time, and could have been avoided if Dave had left details of where he was going with someone he trusted.

Photos of Dave and a white Forester are posted on the Blue Mountains Police Facebook and a geo-located SMS has been sent to all mobile phones between Lithgow, Richmond and Glenbrook.



THE SAD REALITY IS THAT THE SCALES ARE TIPPED IN FAVOUR OF THE DEAD. WE CAN GO YEARS WITHOUT FINDING A LIVE ONE."

IMAGES - LEFT TO RIGHT, TOP TO BOTTOM

BSAR volunteers training for vertical-rescue accreditation. Credit: NSW SES BSAR

Police Rescue officers brief volunteers from SES, Rural Fire Service, NSW Ambulance Special Operations team (SOT) prior to deployment on a SAREX (Search And Rescue EXercise). Credit: Unknown

BSAR search locations, such as canyons, require specialist radio-communication techniques. Credit: Nina Gallo.

A land search forward command post is typically awash in white, blue, orange, red and yellow. Credit: Nicole Bordes Among it all, big questions are asked long before conspiracy theorists and keyboard warriors do. Is he even lost? Is he a criminal? Is he the victim of crime? Does he want to disappear? Does he even want to be found?

TUESDAY 4:35 PM

Dave awakes from a dream. During this rare moment of sleep, pain was suspended, and he was with Matt and Phil, soaking up rays on the rock slab and riffing about life. Now that Dave is awake, though, the earworm returns. The bass line of Queen's Under Pressure becomes louder, rhythmic, like the beating blades of a helicopter.

A helicopter. A helicopter! He urges himself further away from the water's flow, higher up to dry sand, where the leaching contact of damp won't draw his life away.

TUESDAY 4:37PM

From the vantage of a Bell 412 chopper, the aircrewman from PolAir—the commonly used name for the Aviation Command unit that provides aerial support to the NSW police—spots a white car at the end of a fire trail. Through a high-powered nose-mounted camera, he verifies the rego plate: It's Dave's Forester.

Luck has played a part here. Dave bought fuel in North Richmond, and detectives verified it was him in the CCTV. It meant that during the tiny window of clear skies, PolAir could focus its airtime to several passes around the Newnes Plateau—areas that his old canyoning mates had told Dal's colleagues about. Sure enough, minutes after spotting Dave's car, low cloud rolls in again; the Bell 412 needs to return to Bankstown. Boots on the ground are needed to find him now.

Within 45 minutes, two constables from Katoomba Police Rescue arrive at his car and begin searching. They push into the scrub, following fresh La Sportiva tracks for 300m before they disappear. At last, we now have his LKP. But with these short days of late autumn, darkness now cloaks everything; the actual search must wait until the morning.

TUESDAY 5:35PM

It's starting to get dark again. "Please, not a fourth night," Dave weeps, longing for dreams, delirium, death, or rescue. The aching cold, the searing pain, yet another torturous cramp—it's too much to bear. Meanwhile, the relentless taunts of the waterfall's optimistic, life-filled sounds fill the air. Dave's fingernails dig into the coarse sand, trying to hold on to the present. He hears a groan; it takes a while for him to register it as his own.



WEDNESDAY 7:10 AM

As I throw the last things into my backpack, I check out of my life. It feels like I'm shutting down a computer; my work, my family, my friends are all shunted aside once I put on my SES uniform. With blinkered focus, for the next few hours or days, who knows, I'll serve only Dave, his family and the NSW Police.

In one of two BSAR Hiluxes, I drive down the fire trail to the search location which will act as our staging area and forward command post. The vehicle is crammed with gear essential for any bush adventure, plus a few extra things: packs, rain jackets, SES radios, HF radios, InReaches, GPS units, PLBs, hand lines and meal ration packs.

Approaching the command post, I slow down—like clockwork my heart quickens. It doesn't matter how many times I've done this, knowing this is the worst day in someone's life makes me uneasy. How can I conceive what his family is going through? His mates? Himself, if he is even still alive for such thoughts?

We're lucky at this location—we have patchy 4G coverage. It's not uncommon to have to request communications support from an SES CoW (Cell on Wheels) or SES500 (GRN 'Government Radio Network) radio repeater.

When I pull up, I'm greeted by the familiar blue, red, orange and white of a command post, and our Duty Officer (DO) confirms we have twelve field-team volunteers (three teams of four people) and two base members to assist for the day.

There's a term: *Command and Control*. It's the foundation of any emergency services (or military) work. Like an organisation chart, this pyramid-shaped structure helps the effective flow of information and delegation, sets the expectations of everyone involved and, when dealing with crisis and operational situations, is essential for an effective process.

On the scene, each organisation has a Commander—an operational role that isn't necessarily the most senior ranked person who represents their agency, bringing their unique voice and skills to the planning and execution of the job. They report to the Police Search Coordinator, who is in charge of the operation.

I smile as I walk to greet familiar faces. We're an odd bunch who can convey a thousand words with the raise of an eyebrow, or engage in a piss-take which translates as deep respect and a strange kind of love. We each understand this unusual world we inhabit, which for us volunteers, is one we step into and out of about once a month ... we wish it was less.

I enter the Police command post to learn that Dallas (Sergeant Atkinson) has several likely scenarios and a list of search taskings, broken down by difficulty, to assign to each agency. Taskings are usually areas bounded by geographical features, like a spur between two gullies, a particular creek or cliff line, allocated to teams with appropriate skill, expertise and fitness.

There is science to this, layered with local knowledge and a slab of gut instinct. *Missing Person Behaviour* is an area of academic research that fascinates me; search strategy is one of the tasks I relish the most. Topo maps are laid out, background from the detectives is shared, and likely scenarios and risks are discussed. These include if Dave was 'despondent', meaning there's a chance he may have headed into the bush to take his own life.

As volunteers, this can be troubling. We need to ask ourselves, "Will I be OK if this is not a good outcome?" Because our unit works in NSW's most rugged and remote areas, the sad reality is that the scales are tipped in favour of the dead. We can go years without finding a live one.

WEDNESDAY 9:30 AM

Dave awakes to the waterfall's unforgiving sing-song. Then he hears it ... the sound of distant voices. Then silence. "Did I imagine that?" he asks. He doesn't know what to believe anymore. What is real? What is imagined? How can he have been so cold but is now burning so hot? His good arm claws to remove his layers.

What Dave doesn't know is that the final stages of hypothermia are often accompanied by feelings of extreme heat. The muscles responsible for keeping more blood around the inner core shut down, and warm blood rushes to the extremities, giving the sense of a hot flush.

Dave thinks this feeling of heat gives him hope; instead, it means he is hanging on by a thread.

WEDNESDAY 9:42 AM

We move outside to brief all the search teams following a SMEAC (Situation, Mission, Execution, Administration, Command and Communications) template. We also discuss details of our planned SITREPs (Situation Reports)—including location, a description of the terrain, percentage of the tasked area covered, team welfare and intentions—which each team will radio in every hour.

By mid-morning, one team has made it all the way down the

THINK BEFORE YOU **TREK:**

THINK BEFORE YOU TREK IS A CAM-PAIGN DEVELOPED BY NSW POLICE RESCUE AND NPWS TO REMIND US OF SAFE BUSHWALK PLANNING.

ake enough water, food, equipment and first aid supplies

R egister your trip (tell someone exactly where you're going)

mergency Personal Locator Beacon (if you don't own one, they can be hired)

eep to your planned route (and have a map, compass and GPS, and know how to use them) An RFS helicopter provides transport for BSAR volunteers to the Blue Gum Forest during a search. Credit: Brendan Conneely



canyon's exit route, passing the rock platform Dave's mates had told the Police about. There is no sign that anyone has been through recently; no footprints in the sand, no broken branches on the way, no response to voice calls. That box is ticked.

Meanwhile, six kilometres away on a ridgeline south, the other six teams concentrate on areas from the LKP, where the silent Subaru is an ominous reminder of Dave's unseen presence.

WEDNESDAY 11:52 AM

The radio operator walks towards me. She has a look that says, "We have something." My heart quickens. Could it really be over so quickly? History tells us that searches go on for days, weeks even, only coming to conclusions when medical experts say there is no hope. Even still, we add a few more days for the family or maybe our own conscience. That is a task I don't wish on anyone: telling a family—a mother, a father—that all things considered, a search for their child is to be suspended.

I slow my steps to the Police Sprinter van, aware of media hungry for a scoop. I don't serve them; I serve the family and the missing person. The last thing we want is for news to reach the millions before it reaches them.

"Dal, I think we have something."

With measured steps and voices low, Dal joins me at the SES radio as we hear the voice of Amir, one of the BSAR field team members.

"... we found more footprints and then a backpack in the saddle. The prints lead down into the gully. Sue and Sam have gone to investigate; Jim and I have stayed up top for radio relay as the GRN coverage drops out down below. Standby ..."

The backpack matches the images from Dave's Facebook.

The SES caravan is silent as we locate the saddle on the topo from the 8-digit grid reference the team have given. We stare at the radio, hoping for news, wishing it to be good. Just for once, dear God, let it be good.

The minutes stretch out as we wait.

"Base, this is BSAR Team Two."

"Go ahead Team Two," our operator says.

"Secure all radios."

It's the phrase none of us wanted to hear. It means sensitive information is about to be shared. Yet again, a family, colleagues, loved ones—and, indeed, ourselves—will feel the overwhelming tidal wave of grief that comes from the news that someone isn't coming back from a walk in the bush.

"Base, Sue has located the missing person at the base of a small waterfall. He's deceased, there are no signs of life."

No signs of life. Such a cold, clinical phrase, at odds with a landscape so full of life. We all know what to do—we've done it too many times before.

Two hours later, the Police Rescue and Ambulance Special Operations (SOT) team wrap Dave's lifeless form in a protective cocoon such as he hasn't felt for days, taking away his cold, his pain and his loneliness. Then they gently shoulder the weight of his death to a tiny gap in the trees from where his corpse can be airlifted. Had they arrived a few hours earlier, they would have found Dave alive. A simple note to let others know where he was going, let alone a PLB, would have changed everything.

As Dave's body rises above it all, into the thundering embrace of PolAir's Bell 412, there's a silent acknowledgement of how these wild places we all love can be both gentle and savage; a recognition of the fragile veil between breathing and not. **W**

CONTRIBUTOR: Caro Ryan is the author of How to Navigate—The Art of Traditional Map and Compass Navigation in an Australian Context and teaches navigation in the Blue Mountains. NSW.