



Connecting the search and rescue sector

Link is a quarterly publication of
New Zealand Search and Rescue

Government commits to SAR training



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A multi-agency training exercise begins in Auckland's Manukau Harbour, September 2019

Government commits to SAR training

The Government has confirmed it will fund search and rescue training next year, allowing us to cover all tuition fees and compulsory course costs for volunteers.

The funding will be provided via the Tertiary Education Commission's Adult Community Education Fund. This marks the end of a two-year period during which the Government provided interim funding for SAR training on a trial basis.

Manager of the NZSAR Secretariat Duncan Ferner says this is a move to be celebrated.

"We are all working hard to attract and retain volunteers in this sector," he says. "Being able to offer training that is accessible to all provides such a big incentive for people to join us and ensures our experienced volunteers can continue to upskill."

The news has enabled NZSAR to set out a multi-year work plan – taking a strategic look at course content and delivery.

"The innovative delivery of SAR training during the COVID-19 restrictions was excellent and has encouraged us to consider a funding model that offers more flexibility," he says.

A total of 33 SAR training courses were cancelled due to COVID-19, yet LandSAR is on track to deliver 93 courses out of a scheduled 101 this year. Tai Poutini Polytechnic has also largely recovered its training programme, delivering 24 out of 31 courses planned for.

"By finding creative ways to accommodate those courses that were cancelled, such as the online delivery of LandSAR's Outdoor Risk Management and Field Team Leader 1, both providers have been able to pick up the momentum," says Duncan.

NZSAR Training Co-ordinator Alita Bigwood says the new training work plan will build on this idea.

"We want to ensure we can deliver to a smaller number of attendees in regional areas. Under the existing model, for example, a specific training need in Gisborne may not be fulfilled if we can't get enough bums on seats. But by offering a variety of delivery methods, we hope to cater to smaller groups and still ensure our training providers cover their costs."

Remember to check the training calendars in the new year, for any upcoming opportunities to extend your skills:

- Tai Poutini Polytechnic: www.tpp.ac.nz/study-options/search-and-rescue/search-and-rescue/
- LandSAR: www.landsar.org.nz/course_calendar (members' log-in needed).



Preparing to airlift a critical patient as part of a Search and Rescue Exercise (SAREX), Canterbury 2018

Fostering SAR capability in the air

New helicopter operators and their crew will be better prepared to respond to distress situations in New Zealand's Search and Rescue Region thanks to a recent RCCNZ and NZSAR initiative.

A series of one-day workshops tailored for this group by the Rescue Coordination Centre New Zealand (RCCNZ) is being delivered across 16 air bases throughout the country.

Acting Manager of the RCCNZ Kevin Banaghan says the NZSAR-funded workshops aim to increase the level of understanding of SAR in New Zealand and will help facilitate a consistently high level of SAR response by air.

"In recent months, we've noticed a remarkable increase in the number of pilots and air crews that are new to the emergency response and the search and rescue sector," says Kevin. "This coincides with the introduction of the National Ambulance Sector Office (NASO) strategy, which is increasing demands on helicopter operators to provide additional 'on call' pilots and air crew to improve New Zealand's air ambulance service."

"The Air Operators Workshop was conceived during lockdown as an effective way to address the SAR knowledge gap we've perceived among some of these additional staff."

Participants include pilots, winch operators, support crew and paramedics. Local Police SAR Coordinators are also invited to attend. They are presented with a broad overview of the

global SAR system and the various roles and responsibilities of SAR coordinating authorities in New Zealand. They learn about the tasking and briefing process, distress beacons, SAR communications, effective search techniques, SARMAP software, the role of the On Scene Coordinator, aircraft crash site hazards and more.

The first workshop was delivered in Whangārei in October and there have been a further six to date. Kevin says the feedback so far is very positive.

"This training seems to have energised helicopter operators to regard a search and rescue tasking as an important part of their operations," he says. "It's not only a useful introduction to SAR for those who are new to the industry but it's also serving as a good refresher for more experienced pilots and crew."

"We see this workshop as a learning opportunity for everyone," says Kevin. "We don't just broadcast, we also listen."

RCCNZ has already experienced a positive knock-on effect from the workshops, with an increase in detailed debrief forms from helicopter operators following a SAR tasking.

Four further workshops are to be held in the New Year to cover all 11 air operators regularly called upon by RCCNZ.



Welcome Tania and Andrew

Meet two new members of the NZSAR Secretariat team – Tania Seward and Andrew Greig. Both Tania and Andrew joined us last month in new roles designed to make a real impact on the delivery of the Secretariat’s work programme. The appointment of Bridget Hesketh this month to the position of Senior Advisor – Governance, Performance and Monitoring will complete the new contingent at NZSAR, all thanks to the recent investment from government in the SAR sector.

Tania will drive a step change in the way we carry out our communications and SAR prevention activity. Her role consolidates a range of previously outsourced work across social media, print media and awareness campaigns. While she is currently getting familiar with the size and scale of the sector, Tania says one of her first areas of focus will be a campaign that encourages people to take a distress beacon when they head outdoors this summer.

“It’s great to learn about the pieces of the puzzle that come together to provide a service that hopefully no one will ever need,” she says. “There’s a lot of exciting projects happening across the sector and I’m looking forward to getting stuck in.”

Tania is an experienced communicator, joining us from the Tertiary Education Commission where she managed the communications for a workplace literacy and numeracy programme. She enjoys trail running and is currently in pursuit of Wellington’s best coconut milk flat white.

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As NZSAR’s Principal Advisor, Andrew will help manage the Secretariat function to deliver on NZSAR goals. This includes coordinating workstreams to ensure they are delivered on time and within budget; and providing thought leadership to the search and rescue sector.

Andrew says one of his first priorities is the Volunteer workstream.

Andrew is a trained lawyer, and he also spent 20 years in the Royal New Zealand Air Force. For most of that time, he was a pilot on a variety of aircraft including Andovers and Orions, as well as a display pilot with the Red Checkers. Most recently he worked at both the Medical and Teaching Councils, dealing with disciplinary and conduct matters.

“I was ready for a change,” says Andrew. “Search and rescue is a good match for quite a few of my skills and I’m looking forward to meeting all the different agencies involved.”

Out of the office, Andrew is a keen road cyclist and enjoys sailing out in the Wellington Harbour.

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Gender mix in SAR training

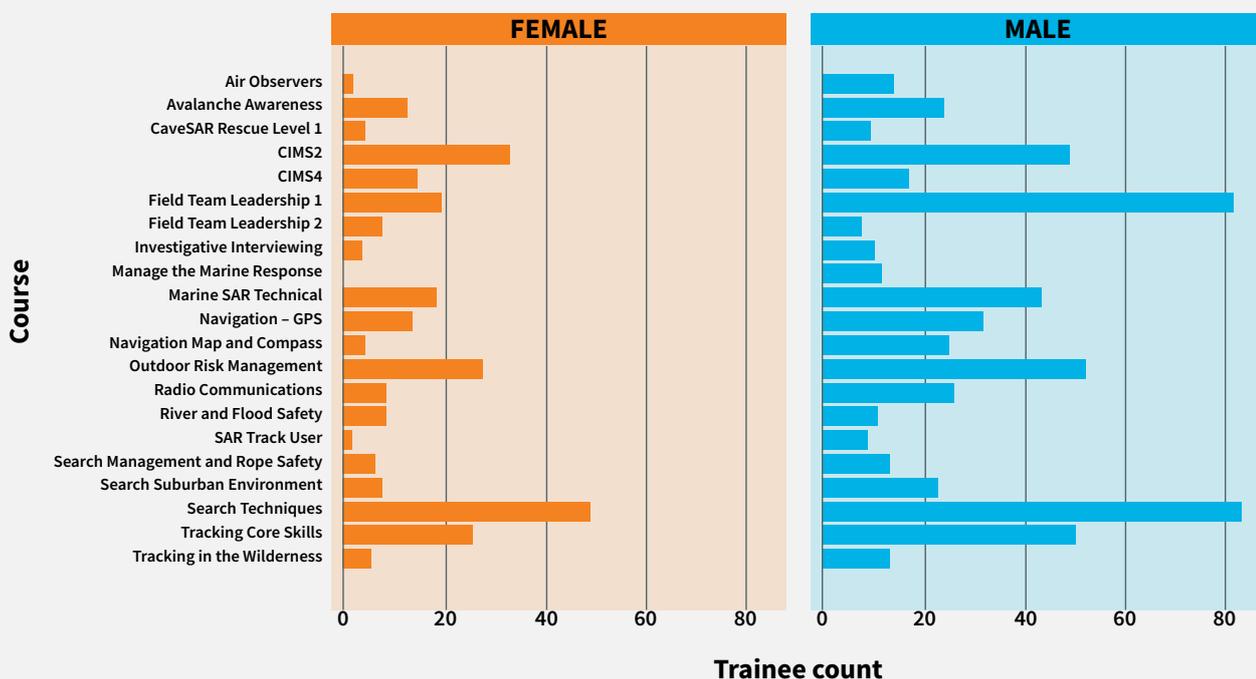
by Jeff Lean, Data Analyst and Assurance Coordinator

The 2019 Volunteer Study showed an overall under-representation of women in New Zealand’s SAR community. Although we don’t yet have good quality, up-to-date data on our national volunteer demographic to confirm this is still the case, some of our training data provides an insight.

The chart below shows the balance of female and male participants on various SAR courses between February and August this year. Bear in mind these are predominantly LandSAR courses, so this data cannot be used to make assumptions across the entire SAR sector. We know, for example, that Surf Life Saving New Zealand has the highest proportion of female volunteers in the sector – and they are not represented here.

We can see at a glance that more men were involved in the SAR training courses below, with the exception of Field Team Leadership 2, which had an equal split between male and female participants. Men represented approximately 68% of all course participants, but this proportion was not uniform for all courses.

As our training dataset grows, we look forward to drawing some interesting comparisons from year to year.



New home for NZ’s SAR Guidelines

Looking for New Zealand’s Search and Rescue Guidelines? They have recently been rehomed on the NZSAR website – you can find them here: nzsar.govt.nz/nzs-sar-guidelines/nzs-sar-guidelines-overview

Published in September last year, the guidelines provide a single point of reference for conducting search and rescue operations in New Zealand. They set out broad criteria and principles for search and rescue, rather than detailed operational procedure.

This is a live document, so if there’s anything you’d like to see included in the guidelines, or if you have some feedback on the content, please pass on your thoughts to your organisation’s member of the Forms and Templates Management Group, or email Rhett Emery, NSSP Coordinator on r.emery@nzsar.govt.nz



On watch at the Rescue Coordination Centre New Zealand, Avalon, Lower Hutt

Caught short despite severe weather warning

Our SAR in Action this month does not feature a dramatic rescue, but rather a recent example of how callouts can sometimes be frustrating exercises that could be prevented if only people would adhere to the Land Safety Code.

At 9.30am on Labour Day, Monday 26 October, the Rescue Coordination Centre New Zealand received an alert from a Personal Locator Beacon (PLB) in Crow Valley, near Arthur's Pass. So began a 28-hour search and rescue operation where, as it turned out, there was no grave and imminent danger for the person seeking help.

Search and Rescue Officer Nick Burt was on watch that morning and managed the response.

"The beacon wasn't registered, so we couldn't trace emergency contacts to determine how many people were in the party or what their intentions were," he says. "But given the location of the activation, the likelihood of distress was high."

Nick contacted rescue helicopters in Greymouth and Christchurch, but neither was able to fly into the valley due to the severe weather. While the Southern Alps had experienced brilliant sunshine at the start of the long weekend, the forecasted heavy rain had set in, with low cloud and strong northwest gales.

Canterbury Police SAR, led by Sergeant Phil Simmonds, were stood up as On Scene Coordinators. They tasked three LandSAR teams from Christchurch and Oxford to assist. Sergeant Simmonds reported "bucket loads" of rain.

"The Waimakariri River came right up – and quickly," he says. "Arthur's Pass DOC advised that all rivers were in flood and not accessible. They also informed us of a group of

"The beacon wasn't registered, so we couldn't trace emergency contacts to determine how many people were in the party or what their intentions were," he says. "But given the location of the activation, the likelihood of distress was high."

20 trampers who were stranded at nearby Carrington Hut (which has a DOC radio), but were confident and comfortable remaining there. We put the LandSAR teams on standby."

Meanwhile, back at RCCNZ in Avalon, Nick was tracking the PLB and could see it moving further up the valley to Crow Hut.

Later that day the Christchurch Rescue Helicopter crew decided the weather had cleared enough to make an attempt to reach the hut, or at least drop in a LandSAR team as close as possible to see what they were dealing with. But low cloud, approaching darkness and high river levels ruled out both options.

"The plan was to reassess the weather in the morning and try again," says Nick.

At 11.15am on Tuesday 27 October, the cloud had lifted 250 feet above the valley floor, which provided sufficient visibility for flying. The Christchurch Rescue Helicopter, with two LandSAR members onboard, reached the hut and found a solo female trumper, who was not injured, but anxious because she couldn't cross the river.

“She said there was no dry firewood at Crow Hut and little remaining food – in her words, she only had two bread rolls she’d packed for her walk out,” says Nick. “She didn’t think the weather forecast was that bad.”

The trampler had borrowed her flatmate’s PLB. She was flown out to the road at Klondyke Corner as it was unlikely the river and side streams would subside to a point where she could safely cross before the next storm arrived. Nick says search and rescue operations like this one highlight the importance of being prepared.

“Check the weather forecast, have the right gear, take extra provisions, carry a registered emergency beacon and let people know your intentions,” he says. “In this case, the trampler had the security of the hut and could have waited out the worst of the weather.”



www.adventuresmart.nz



LAND

The land safety code

5 simple rules to help you stay safe



1. Choose the right trip for you

Learn about the route and make sure you have the skills for it.



2. Understand the weather

It can change fast. Check the forecast and change your plans if needed.



3. Pack warm clothes and extra food

Prepare for bad weather and an unexpected night out.



4. Share your plans and take ways to get help

Telling a trusted person your trip details and taking a distress beacon can save your life.



5. Take care of yourself and each other

Eat, drink and rest, stick with your group and make decisions together.

The search for Stephanie Simpson

When 32-year-old British tramper Stephanie Simpson was reported missing earlier this year, the search and rescue operation that followed was covered extensively by media in New Zealand and abroad.

Although the outcome was not a happy one, it did bring closure for Stephanie's family who were able to take their daughter and sister home to England.

The Police-coordinated search took place over five days in the thick bush and alpine terrain of Otago's Mount Aspiring National Park between Haast and Makarora. Thirty-one local LandSAR members collectively dedicated 778 hours of their time, together with Police SAR, Alpine Cliff Rescue, CanyonSAR, three LandSAR dog handlers, the USAR Drone Team and three helicopter crews. Volunteers came from all over the South Island to assist.

Some new search techniques and equipment were used over the course of the SAROP, including drones and high definition cameras.

Incident Controller Sergeant Mark Kirkwood from the West Coast Police SAR says the rugged landscape was extremely challenging for search teams.

"The initial search boundary was huge, approximately 60 square kilometres before we managed to narrow it down," he says. "We were looking at a minimum of three hours each way to walk in, so everyone needed to be helicoptered in and out."



A CanyonSAR team works their way into the canyon, downstream from where the boots were found

Search timeline

Day 1, Monday 10 February 2020

The alarm was raised at 8.45am, with a call to Police from Stephanie's employer in Wanaka. Stephanie had not turned up for work and her colleagues said she had planned a day tramp on Saturday to either the Blue Pools area or Brewster Hut. Local Police made inquiries before handing over to West Coast Police SAR.

Stephanie's vehicle was found at the Fantail Falls car park, the start point for Brewster Hut track. A helicopter did a hut check and continued searching in the area that evening to no avail. Arrangements were made for LandSAR dog teams and Alpine Cliff Rescue teams to begin searching the next day.

Day 2, Tuesday 11 February 2020

The search area was contained and the land search began. Family informed Police that Stephanie was wearing a Garmin Forerunner watch. Armed with the serial number, NZ Police in the UK asked Garmin to try and download track data from the watch.

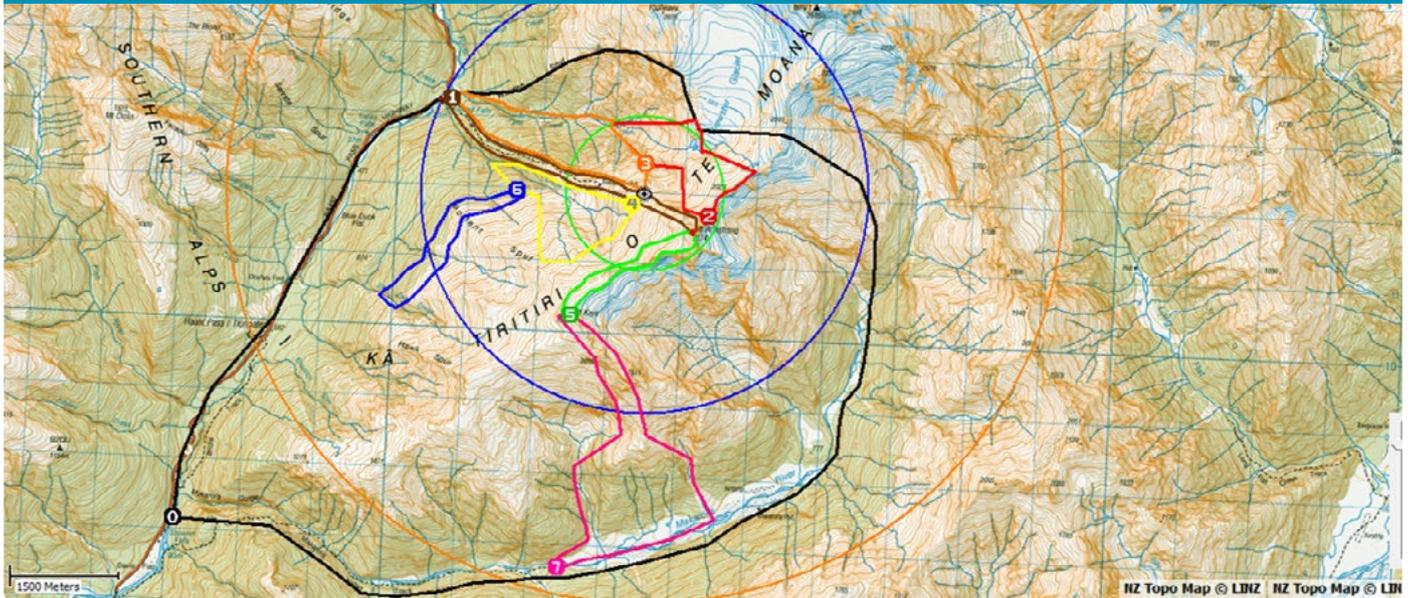
A sound and light line was conducted between Brewster Hut and Fantail Falls car park.

Day 3, Wednesday 12 February 2020

The land search continued, with LandSAR teams from all over the South Island offering to help.

Highland Helicopters from Dunedin scoured the search area using a camera system with Forward Looking Infra-red (FLIR), thermal imaging and high definition.

A USAR Drone Team from Christchurch flew all day and into the early hours of the next morning with their thermal drone, taking 2000 images.



Day 4, Thursday 13 February 2020

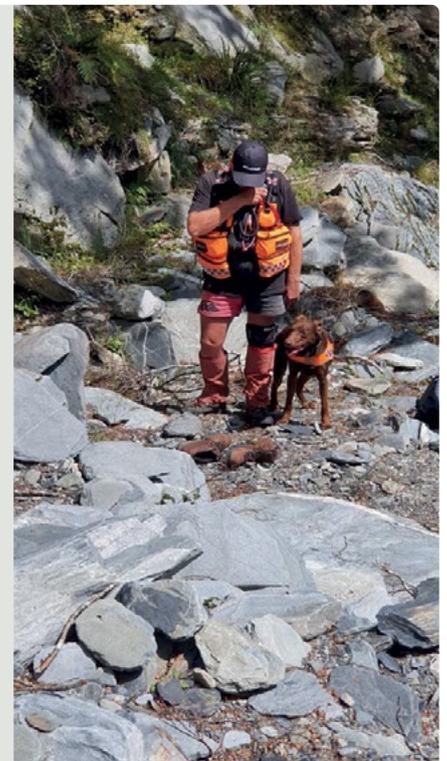
The search focused on the Fantail and Pyke Creek catchments.

In the afternoon, a search dog team found a pair of walking boots confirmed as belonging to Stephanie on a bank near Pyke Creek. The terrain downstream from the discovery was steep, so a CanyonSAR team stood by for deployment the next day. A RECCO device was sourced due to the possibility that it could detect the Garmin watch when flown close to its location.

Day 5, Friday 14 February 2020

With a major weather front expected the next day, all available resources were put into the Pyke Creek catchment. The helicopter crew with the RECCO equipment flew in first and the operator spotted a backpack. At the same time the drone team had informed the Incident Management Team that they were reviewing their footage from the day before and had seen the same pack. The pack was 900 metres downstream from the location of the boots.

The CanyonSAR team were upstream from the pack and worked their way down through a series of waterfalls, using avalanche probes to check the pools below each waterfall. Sadly, this is where Stephanie was located, deceased.



Stephanie's boots were found on a bank near Pyke Creek

Insights

Sergeant Kirkwood says the technology used in this search had not been used before in combination and “it greatly assisted the search effort.”

“The co-operation we received was outstanding. We put the word out and people from all over the country and abroad assisted. It was certainly very humbling and I know everyone was hoping to find Stephanie alive, even on the last day.”

West Coast Police SAR were able to see the route Stephanie had taken after her GPS watch was retrieved.

“We revisited the search area a few weeks later and could pinpoint the decision point where Stephanie turned off the track,” he says. “We used this information to ask DOC to provide signage in the area and place an article in the hut, to hopefully prevent a reoccurrence.”

Common threads in operation reviews

NZSAR carries out independent reviews of search and rescue operations (SAROPS) to identify areas for improvement and to reinforce good practice. Typically, three to five SAROPS are reviewed each year – all of which are available on our website.

National SAR Support Programme Coordinator Rhett Emery says the recommendations from these reviews, when taken on board, can lead to a more efficiently executed operational response.

“Systemic learnings, including any skill, equipment, technology, document, agreement, process or procedure all feed into improved SAR processes, standard operation procedures and teaching materials,” he says.

We’ve looked at the consistent themes and insights from the past eight NZSAR independent reviews conducted since 2018 and collated them here.

Incident Management Teams (IMT)

- All personnel appointed to the IMT must be fully trained (as appropriate) in Coordinated Incident Management System (CIMS) / Manage The Initial Response (MTIR) / Manage The Marine Response (MTMR)
- Access specialist subject matter experts to support the IMT
- Utilise the Family Liaison Officer and a Media Liaison Officer early in an operation
- Establish dedicated Intelligence Function personnel early in an operation
- Consult a medical expert early in a search; they can provide a medical profile to support search planning, as well as survivability information
- Utilise an Iwi Liaison Officer to support local engagement
- Ensure lost person scenarios are supported by the evidence available
- Draw on specialist support, such as a Police Investigation team, and from out of District as required
- Maintain all SAROP documentation, to support an operation that may become extended or require review before suspension.

Communications and Technology

- Ensure IT systems function and there are people who can operate them proficiently
- Keep on top of changes in technologies for search operations, or access specialist subject matter experts.

Guidelines

- Refer to, and apply, relevant sections of NZ’s SAR Guidelines / Police SAR Chapter / Land SAR Guidelines
- Apply search training methodologies
- Review and update risk assessments and mitigation strategies; consider using an independent review to confirm outcomes.

Resources

- Offer training in more adverse conditions to ascertain safe operating boundaries.



Nominations for NZ Search and Rescue Awards

Do you know an organisation, a group, or an individual who you think deserves special recognition for their contribution to search and rescue?

Nominations for the Annual NZSAR Awards are open and we’d love to hear from you. They can be made for an operational activity that took place during the last calendar year or support activity. More information and nomination forms are available on our website: www.nzsar.govt.nz/nzsar-awards/nominations. Now is the time to get this underway, as our closing date for the 2020 Awards is Friday 29 January 2021.



10 questions with ...

Charlotte Aronsen

Charlotte is one of LandSAR's newest Board members, elected by the LandSAR membership in October 2020. Based in Christchurch, she says she is thrilled to have the opportunity to contribute to the governance of an organisation that she already cares deeply about.

What has been your involvement with LandSAR to date?

I'm currently an operational field team member of the Christchurch LandSAR group. I joined the committee in 2018 and took on the role of Secretary the following year. I do most of the social media for the team and a bit of fundraising too.

Why search and rescue?

A friend mentioned LandSAR to me while I was doing a couple of stints as a DOC warden at Nelson Lakes about five years ago. It appealed straight away because I love being outdoors and wanted to give back to the community. I was really fortunate to have perfect timing on the pre-requisite courses, so became operational quite quickly.

What motivated you to stand for the Board?

I've actually been interested in it for a while, but it was a presentation on LandSAR's volunteering profile at last year's AGM that gave me the nudge I needed. What struck me was the lack of balance between females and males and the ageing demographic. A couple of people encouraged me to stand, so here was this opportunity to get involved, understand how the Board works and hopefully make a difference in another capacity.

What is the makeup of the LandSAR Board?

We're a group of two women and five men.

What is your day job?

I work in the insurance industry as Manager, Claims Practice and Customer Assurance for IAG. My experience spans over 14 years, so it lends itself well to the Board's Risk and Audit Committee, which reviews all policies, financial commitments, and undertakings.

How do you find time for all these different commitments?

I really like to stay connected, so I make time. Because it's something I enjoy doing, I find it's easy for me to pick up and do late at night or in the weekends. It's about being clear

with yourself - there's always going to be days when I'm just too busy, but making the effort to enjoy a balance in my life is important to me.

My partner also volunteers for Christchurch LandSAR, so we support each other. There's been times when both of us have been out on a search and rescue operation (SAROP) together, but we're generally not on the same field team. Between the two of us, we understand the commitment involved, and since we have shared interests in tramping and the outdoors, it just works.

Can you tell us about a memorable SAROP that you were involved with?

Probably the most memorable was a SAROP which formed the basis of a successful search and rescue exercise (SAREX) a few months later. As we had three Incident Management Teams running, it gave our group a valuable training opportunity to experience being part of a different team. One of our field teams located the missing person at the SAREX, which unfortunately didn't happen in the original search, so it was great to see so many positives come out of it.

How do you relax?

I tramp. I enjoy heading outdoors. I also like reading and going to the gym.

What would you say to someone who was considering volunteering for LandSAR?

I think the first thing is to make an enquiry and really sell yourself in the skills and experience department. I think some people who are interested may not appreciate how many candidates we get.

One key thing you would like to pass on to others?

Do something active in life with a group of people that are amazing. The rewards are endless.



Duncan's desk

I'm sure many of us will be pleased to see the back of 2020 as we look forward to 2021. Covid-19 will still affect us for some time to come but it's been great to see the proactive work taking place across the sector so that we are ready should a resurgence occur somewhere in the country. Hopefully that won't happen, but it's good to be ready – just in case.

As you can see in this issue, the Secretariat has grown a bit in the past few months. This growth in staff reflects the increased work we are being asked to do and the increase in funding we are required to monitor across the sector. As I mentioned in the previous issue of Link, this increased investment is an opportunity for us all to make significant improvements to the SAR sector. It's also a signal of confidence in the sector's ability to deliver a wide range of projects on time and within budget. The Secretariat is now well positioned to support the investment and I look forward to getting these projects done.

In late November, we hosted a volunteer workshop to plan and implement a range of projects to better understand, recruit, retain and support the sector's vital volunteer workforce. It was great to see several fresh faces there, including representatives from the National Emergency Management Agency (NEMA) – as we want to forge better, more effective relations with Civil Defence volunteers in the NZ Response Teams. We are very keen to work collaboratively across the sector as much as we can, but also understand that some challenges are better dealt with by agencies.

We have also made a number of improvements to SARdonyx in the past few months. Some were minor bug fixes and others more substantial. We have a planned pathway of improvements for the SARdonyx system and will set about getting them done as funding and capacity allows.

As I write this, we have nearly completed our discussions with the Tertiary Education Commission regarding the government's investment in SAR training (refer story on page 2). We look forward to moving from the current interim arrangement to a more secure, long term arrangement.

Finally we have also been supporting Water Safety New Zealand as they develop their new Water Safety strategy and workplan. In a very real sense, their success is our success, so it is vital we support them and their work to reduce water safety incidents and improve our terrible drowning toll. If you have the opportunity, please lean in and support this work.

I hope you and yours get the opportunity for a break this holiday season.

Stay safe
Duncan

Websites

www.nzsar.govt.nz

Search and rescue sector resources and information, including a PDF of this newsletter

www.adventuresmart.nz

Safety information and tips for people planning outdoor activities

www.adventuresmart.nz/distress-beacons

Example of our latest SAR prevention work - promoting the carriage of beacons

www.beacons.org.nz

Information about 406 beacons, including where to purchase, rent and register a distress beacon

www.nzsar.govt.nz/sardonyx/index.html

Interactive dashboards using groups of records from SARdonyx, our joint search and rescue operational information system

www.nzsar.govt.nz/nzs-sar-guidelines/nzs-sar-guidelines-overview

New Zealand's Search and Rescue Guidelines

www.nzsar.govt.nz/nzsar-awards/nominations

Nomination forms for 2020 New Zealand Search and Rescue Awards

www.tpp.ac.nz/study-options/search-and-rescue

SAR multi-agency training

www.landsar.org.nz/training-calendar

LandSAR training courses (member's log-in needed)

www.mountainsafety.org.nz

New Zealand Mountain Safety Council

www.coastguard.nz

Coastguard New Zealand

www.surflifesaving.org.nz

Surf Life Saving New Zealand

www.maritimenz.govt.nz

Maritime New Zealand

www.watersafety.org.nz

Water Safety New Zealand