

Move over men – women are walling *by Jim Holdsworth*

Greetings



Emma Knowles



History shows that building with stone has been 'men's work' for centuries. The venerable publication *If These Walls Could Talk* (Corangamite Arts Council, reprinted 1999) includes many stories and photographs of nineteenth century walling across the vast volcanic plains of western Victoria. Peering out of grainy black and white photos are nuggety wallers, clad for labouring in the paddocks and looking like they're taking a moment off from their hard work to pose for a rare photograph. All men; not a woman in sight. In that era the womenfolk were most likely at home milking the cows, tending the vegetable garden, crocheting the anti-macassars or feeding the children.

As articles in this issue attest, that scenario has been assigned to the annals of history. Dry stone walling is no longer the preserve of men. The increasing presence of women among the ranks of those who work with stone is refreshing and encouraging! Any perception that this is men's work has been put aside by a growing coterie of professional women, here and overseas. A scan of the list of practitioners in our kindred organisation, the Dry Stone Walling Association (UK), shows a healthy level of female professional membership and leadership.

Last year, visitors to the Rare Trades Trail in Bathurst saw Emma Knowles and Tracy Cumberbatch with Wayne Fox building an impressive dry stone seat at the Agricultural Research Station. And Tracy was a crowd favourite at the Lost Trades Fair in Kyneton as she chatted to people about the key points of building a good wall while she sorted, sized, lifted and tapped stones into place. Pleasingly, I don't recall any comments of surprise from the public at either of these well-attended events that these wallers happened to be female. And of course that's how it should be; we're not in the nineteenth century any more.

It is to everyone's benefit that women are now prominent in the industry, whether as practitioners or in other roles. My first contact with this Association back in 2003, was of the active advocacy of our first chairperson, the feisty and strong-minded Josie Black, a farmer from Kolora. Around the table were women such as Anne Mulholland, Wendy Bitans and Raelene Marshall; all influential contributors to the establishment of this organisation and in shaping its direction.

Over the years your Committee has included many women in addition to those early members: Louise Manifold, Kathy Woodward, Sandra Fitzgerald, Charmian Brent, Sue Jones, and in our current committee Lyn Allison and Natalie Paynter, all making their mark and ensuring walling and all that it entails is no longer solely a male pursuit. The Association is the richer for their particular perspectives.

This issue

Women wallers

- Sally Hodgson
- Emma Knowles
- Lydia Noble
- Wendy Simpson

Stone wall junkie

More *borries*

Limestone viaduct

Running joints

Key issues for DSWAA

Women wallers - Sally Hodgson

Visiting the DSWA(UK) 50-year celebration walling competition at Kirkby Lonsdale (Cumbria) I could hardly help notice that 51 of the 54 competitors were men (*The Flag Stone #42*). Did this mean that men are better at walling, more competitive, or was it entrenched tradition? And yet among the onlookers there were just as many women as men (some partners, sisters, mothers?) and among the organisers it was almost all women.

I have been running workshops for beginners in SA for 6 years, firstly with Wally Carline as instructor followed by Jon Moore. About a quarter of the attendees have been women while quite a few of the men have been enrolled by their female partner as a birthday present and in one case a wedding anniversary present. So there seems plenty of interest from women. As well, they are at least as good amateur wallers as the men. It has often been said that good walling is not just about lifting or smashing big rocks, it is about problem solving and attention to detail.

Here we profile (in alphabetic order) four women wallers: **Sally Hodgson**, a Master Craftsman [sic] and instructor from Derbyshire; **Emma Knowles**, a Level 2 waller who recently established *Stone of Arc* based in Wellington (NSW); **Lydia Noble**, the UK's youngest Master Craftsman who has featured in the previous two issues of *The Flag Stone*; and **Wendy Simpson**, a standout performer in the most recent beginners workshop held in SA.



Sally Hodgson started dry stone walling at age ten helping to repair walls on the family hill-farm in the Peak District of Derbyshire. Such is the familiar tale amongst wallers from this part of the world where dry stone walls are ubiquitous and skills are passed down through families. Fast forward and Sally completed a degree in Fine Art and Textiles with work experience at Zandra Rhodes in London. Far from dampening her en-

thusiasm for walling she saw a lot in common with tapestry weaving, the final pattern gradually emerging as the essential parts find their place in the overall plan.

After university Sally travelled the world, settling for a while in Australia where she met Bill Harlock (see *The Flag Stone #41*), one of our last rural dry stone wallers.

Not long after I met Bill in 1990, he became involved with the Corangamite Dry Stone Wall Conservation Project. Part of that group was Nathan Perkins, a 22 year-old Australian who had spent several months over here in Britain, mainly with us at the Derbyshire Branch of DSWA, where we showed him the basics of dry stone walling. Nathan went on to achieve Master Craftsman status, at the time the only waller to hold this outside of Great Britain. We still have a wall built by Nathan on our farm, before he took his enthusiasm back to Australia, passing his skills on through his own work, and through teaching others.

My own walling experience started with repairing walls for farmers, never thinking this would become my business. After the first year of gapping farm walls, people began asking me to do garden stone work, not just walls but also paths, ponds, steps, etc. This led to sculptures, and then eventually to dry stone buildings. My business just grew and grew, not by chance but by hard work and commitment. So for the past 30 years I have earned my living as a dry stone waller. Soon after starting my walling business I also began teaching, as there was a huge demand. This tested my own skills and was in contrast to the isolation of walling. I also joined the DSWA and entered walling competitions, usually as the only female competitor. This increased my speed and quality and I made great friends all around the UK.

Women wallers *(Sally Hodgson cont.)*



People often say walling is all about patience, but I disagree. More important is persistence and stamina to see a job through to the end. If you are commissioned to build 350 metres of wall you simply have to turn up every day, sometimes in the rain, the snow or in really hot weather and get the job done. Often you are working on your own so you need self-belief in your skills, in your body and in your capacity to realistically assess a job.

Fortunately I just love dry stone walling and wouldn't want to do anything else. I'm confident that this is something that I'm good at, I welcome the challenges, and I can earn a living from it. I'm all for inclusivity but I'm not out to prove anything about women as wallers. This is a craft that is open to everybody, no matter what race, what gender, and in many instances in spite of disabilities. We should all have access to the same learning, opportunities and enjoyment.

In 1994 Sally was awarded a Winston Churchill Travel Fellowship to study dry stone buildings in Norway and Himachal Pradesh (India) – two regions with vastly different climates, economies, cultures and of course stone. A common thread through these disparate environments was that the skill of dry stone walling had become a

victim to the pragmatism of mortar, despite well-built dry stone walls invariably outlasting mortared imitations.

Among many insights Sally came to realise 'the extreme importance of the traditional methods of craftsmanship. Through the small part that I play in conserving old methods, restoring old walls and buildings, and teaching ... the graceful and beautiful craft of dry stone construction can be carried on and enjoyed by future generations.'

Sally lives on and runs a hill-farm in Derbyshire. Walling is very much in the family and she often collaborates on projects with her sister Jo, also a professional waller but in Canada,

Sally holds the Dry Stone Walling Association (DSWA) Master Craftsman Certificate, one of only four women ever to have reached this standard. She is the first woman ever to become a Dry Stone Walling Examiner.

She is a full-time waller and teaches part-time at the [Derbyshire Eco Centre](#), the county hub for sustainability learning. The classes in stone walling provide DSWA certification to Levels 1, 2 and 3, catering for those beginning a career through to professionals looking to upgrade. The Eco Centre offers other practical countryside skills to a vast range of students including learners with special needs, young people in neither education/employment or training (known as NEETS), learners with mental health issues, and lately unaccompanied asylum seeker children.

Next door to the Eco Centre is the [National Stone Centre](#) where Sally occasionally team-teaches with other professional wallers under Walls for the Future. The program takes students through to Levels 1, 2 and 3.



Boys (yes, all boys!) proud of their successful Level One assessment by Sally H (partly hidden)

Women wallers – Emma Knowles

Growing up in Yorkshire dry stone walls were always part of my life. The first training course I attended was in the Lake District when I was just 8 years old. For many years I volunteered for the National Trust and Forestry Commission and amongst other things repaired dry stone walls, but never expected to be doing it for a living.



I came to Australia as a backpacker in my early 20s. I loved the country so much that I returned to England to begin what turned out to be a 10-year mission to become a skilled migrant. Led by the in-demand occupations, I studied psychology and became a mental health services manager for 14 years, initially in the UK, then Sydney and Melbourne.

Three years ago I left Melbourne in my Kombi bound for somewhere else. I knew living in a city and wearing a suit wasn't my long-term route to happiness, so I drove north through the country, working on farms as I went, basically 'odd jobbing': fencing, beekeeping, gardening, managing stock and all sorts of things like that. On hearing my accent one employer asked if I could build a dry stone wall. I said that although I had repaired a few walls and knew the basic principles, I didn't feel competent to create a wall with features and then charge for it, but I'd see if I could develop my skills when I returned to the UK a few months later. Back in Yorkshire I contacted the DSWA and ended up spending many amazing months learning the ancient art of walling from the likes of David Griffiths and Andy Loudon. I joined and practised with the Yorkshire and Otley Dales branch and went in for the exams, gaining a Level 2 professional qualification.

I returned to central-west NSW in 2016 to build the wall that started it all. Word soon spread and I started getting calls from people enquiring about construction, repair and training. I later returned to the UK to further develop my skills and train as an instructor, and now here I am three years on, settled in NSW running my business, *Stone of Arc*, and couldn't be happier.

In contrast to Australia, the UK has a vast and highly active walling community. They have an internationally renowned accreditation system and have developed efficient ways of teaching and maintaining the authentic skills into the future. In order to develop a similar community here I've been working with the DSWAA, DSWA UK and Geoff Duggan. I was recently awarded an International Specialised Skills Institute Fellowship assisting me to increase my qualification level so that I am better able to help facilitate an Australian accreditation system. If we achieve this, not only can current wallers have their skills evidenced, valued and endorsed on-shore, the truly authentic skills will be maintained, and we may attract new wallers to the profession or community.

Being a woman in this trade does have its challenges, though none of them are physical. I've always found other wallers to be non-biased and supportive, and trainees of all genders appear to respond particularly well to female tutors. However like most, this trade is definitely set up for men. From simple practicalities like the unavailability of smaller gloves or steel toed boots, to not being taken seriously when making initial contact with quarries, potential employers, and merchants. I strongly believe that if we are to encourage more women to take up dry stone walling we need to start by gender neutralising the training manuals and considering a new inclusive title for the certification scheme. Some may say its only words, but words have a huge influence. I'm not sure many men in a historically female profession like hairdressing would be happy to become a Mistress Craftswoman just because they're in the minority and it's deemed too hard to come up with an alternative title. Likewise, I for one have no aspirations to be called a Master Craftsman once I achieve that immense level of skill; it's extremely off-putting and it really does matter.



Showing the boys how it's done

Women wallers - Lydia Noble



Lydia Noble has featured in the past two editions of *The Flag Stone*, so readers might ask what more could there possibly be to say. In TFS # 43 the focus was on one of her walling projects (a corbelled roof on a dry stone gamekeeper's shed); here we look at Lydia the waller.

At 23 Lydia is the youngest ever Master Craftsman [sic] under the DSWA(UK) accreditation scheme, probably making her the youngest in the world! She began smashing records at age 14 when she achieved her Level 1, then at 16 her Intermediate. She then commenced full-time professional walling, beginning with a 150 metre field wall near Shelley (West Yorkshire, on the edge of The Pennines). Indeed, many of the stone buildings in Shelley were built by members of the Noble family over the past 200 years, Lydia adding to the inventory. By age 18 she had her Advanced certificate, soon becoming also the youngest ever UK waller to achieve the equivalent qualification in France.

Experience is a great teacher as Lydia now reflects: 'After I had got my Advanced I realised that really I should have waited and gained more experience rather than pushing through the early tests. Sure, I achieved what I wanted, but it would have been a lot easier had I been more patient and done my Levels 1 and 2 at about the time I actually did Advanced.'

When I met Lydia at the DSWA 50th Anniversary walling competition at Kirkby Lonsdale in 2018 she was one of only three female competitors in a field of 54. She was then pretty confident that she would attain Master

Craftsman status that year. Not surprisingly, she did. This qualification requires completing a range of complex features such as step stiles, squeeze stiles and pillars in their own time, followed by the timed test: creating a right-angled corner of five square metres in seven hours.

Since 2015 Lydia has teamed with (slightly) older brother Cuthbert, also a Master Craftsman, at [Noble Stonework](#). Their portfolio includes projects at some of the most prestigious events in the UK, such as RHS Chatsworth, RHS Chelsea along with the Glenstone Foundation in



Well head

Women wallers (*Lydia Noble cont.*)

Maryland (USA). Their work has also taken them to Canada, France, Spain, Italy and Switzerland, but unfortunately not yet to Australia.

At the Anniversary walling competition the gender disparity was overwhelming. Not only were 95% of the competitors and most of the judges male, most of the organisers and at least half of the spectators were female. This struck me as very 'old school', but Lydia didn't appear at all daunted by it. So I asked her how accessible this craft, traditionally the male domain, really is in the modern age.

I'm sometimes asked if I faced any obstacles as a woman in what has been traditionally a male occupation. It did happen a bit when I was younger, people making comments on building sites and at competitions and stuff. But once they had seen me at work or watched me beat their grandson in a competition they soon shut up. These days men on building sites seem a bit intimidated and tend not to say anything at all. I'd like to think that when they see my skill I earn their respect. On balance I would have to say that there are probably more good experiences than bad, being a young woman in this trade.

I ran a women's walling workshop last April that might interest your readers. There were 18 participants and two other instructors one of whom was 70 years old – that's three times my age! It was a really great day with a really different vibe from a normal course. Everyone worked as part of a team without being told to – it just seemed to happen so naturally. And they were all so keen to do everything correctly so that internally it was a very strong wall. Quite often on courses with men, someone wants to be the fastest, lift the biggest stones, etc.

I feel like you never stop learning in walling. There are so many possibilities out there and I want to work with as many different wallers, stone types and styles as possible. It feels as if I have been going to DSWA events and meeting wallers all my life, and this has opened many doors and encouraged me massively to better myself as a waller.

Not only do I see more and more women taking an active interest in dry stone walling, but also many more young people. Anything but a 'dying trade', walling is a vibrant industry for people willing to take on the training and develop their skills.

Today Lydia and Cuthbert still do field boundary walling through Noble Stonework: 'We actually really enjoy be-

ing out in the middle of the countryside and often don't really want the job to end'; but increasingly they are called on for [complex features](#) such as arches, pillars, bridges, dry stone paving and even dry stone buildings.



Building a circular dry stone floor inspired by the work of Cumbrian Master Craftsman [Andrew Loudon](#)

Women wallers - Wendy Simpson



Wendy Simpson with Jon Moore, where it all began ...

My work commitments have decreased over the past year, bringing me to think about which of my interests will come to the fore when my employer gives me that final hand-shake (no gold expected). For sure, the answer is – gardening. Then I'll have to address some of those structural design issue which have plagued me since I inherited this garden from its original owner.

I have several other interests. Although I'm not artistic, I like to create things with my hands. I'm a sewer; the skills passed down to me from my grandfather who created high quality embroidery and tatting. What I didn't glean from this man, born in 1898, was an ounce of gender bias. It never occurred to me that I couldn't be solely responsible for my very structured garden, from trimming two-metre hedges, to finding a solution for my failing sandstone walls, clearly built to a budget (read as 'time is money') when the garden was established fifteen years ago.

To help me tackle the walling challenge I attended the DSWAA course in October. The course taught me about the options I have; it probably saved me from giving up on my dream to have a dry stone wall. I learned how to correctly structure a wall – there's more to a wall than you see on the outside – and which walling guidelines could be manipulated to accommodate my situation.

My little plot of land can't accommodate a typical 1-in-6 gradient free-standing stone wall, growing up from a 600mm base. As much as I'd love to create that traditional 1.3m high rugged, golden statement through the medium of natural rock, I'm going to have to compromise in my small garden. I've come away understanding the advanced planning required before launching into this project, the key structural elements for a safe wall and how to solve the eternal problem of which stone goes where. I now appreciate how much time I will need, the space involved, where to source supplies, their likely costs, and the 'tools of the trade'.

Accustomed to sitting at a desk all week, my body was ready to stop at the end of each day of the course, but my brain wanted to keep going.....just like a jig-saw puzzle that won't release its tentacles.....just one more piece then this one in my hand will be the perfect fit before that cross piece, then wait there'll only be one metre to finish this line.....the sun is setting. Not a mindless craft, it is a series of little challenges. I truly relish a pursuit that requires some concentration but does not create the stress of my typical work day. The satisfaction of using my hands, not just to create something that is functional, but that will last beyond my time (so I hope, if I can retain all that I learned from those two practical days).



... and finished with the copes

Women wallers (*Wendy Simpson cont.*)



Look at this!

Stone walls have always fascinated me. Creating a wall is my attempt to be artistic; to imitate nature, to use my love of the outdoors and gardening, to build something more permanent than a flower bed. If I can leave a wall, then I feel I'm leaving something worthwhile for those who may care for my little patch of land in the future.

Reflections of a dry stone junkie

Raelene Marshall (DSWAA committee)

If history judges us by what we leave behind, not how long it takes, nor how we get there, then the dry stone story journey for each and every DSWAA member and Committee member will be unique.

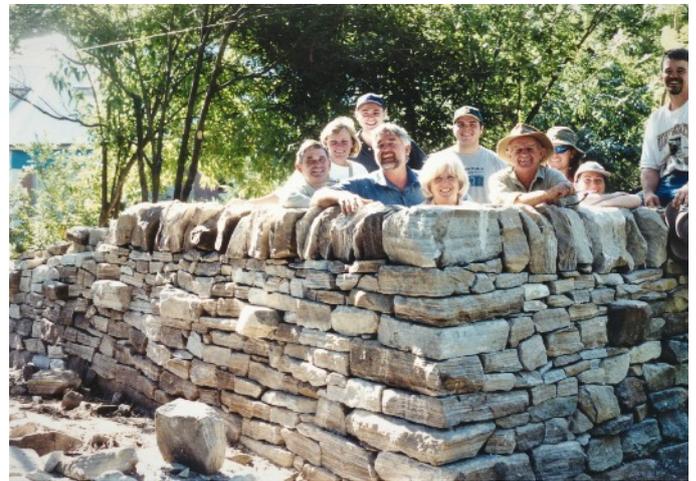
When the editor first approached me to contribute to this particular women-in-walling issue my immediate reaction was 'but I don't build walls.' And yet, upon reflection a very brief dabble in wall building in both Victoria and New South Wales with current DSWAA member and Master Craftsman Geoff Duggan were significant keys to unlocking my desire to try to protect, preserve and promote the heritage of walls and the craft of walling for future generations.

I realise now that these memories began in the late 1980s when I was managing Arts and Culture for the City of Keilor and in the process of developing the Scottish Baronial Architectural Overnewton Gatehouse and site as an Arts Centre for the local arts community.

The dry stone walls built in the 1800s as part of squatter William Taylor's Overnewton Homestead Estate are sited these days in an outer suburb overlooking the Keilor market gardens area. Walls that have survived to tell the tale of the important role they once played in the landscape aesthetic of the area's early agrarian history.

Bring some patience, perseverance and a problem-solving headset along to a DSWAA course, and you'll come away with the confidence to create a lasting natural structure, answers to the concerns that may have been holding you back, and awareness of the potential pitfalls. You will also see that a good wall is not a quick wall – it is not just stacking rocks on top of each other. We built about 10m of wall in a weekend and that was with nine of us! Perhaps that makes it even more worthwhile when at the finish you step back and look at this wonderful thing you have built.

Although I'd read about the principles, watched far too many hours of YouTube videos, I still fell for some simple mistakes during that weekend course. I appreciated the Jon's on-the-spot guidance, reminders and encouragement and the opportunity to brain-storm solutions with my walling partner (another woman!). There could be nothing quite like a bit of hands-on practical experience before embarking on my own wall.



Building a wall (front centre) with Geoff Duggan

At the time the Gatehouse site was being developed it had been under the jurisdiction of the Keilor Council for many years. Separated from the main Overnewton Homestead by the old Calder Highway, then a main route to Bendigo, the site provided an ideal opportunity to profile the dry stone craft in a contemporary context.

If stones and their qualities really do have the capacity to engage people in strange ways, then fortuitously, the seven year from vision to reality project, managed to capture the imagination of a wide range of State and

Reflections (*cont.*)

Federal funding bodies. To that end, PLACE (a State People, Landscape, Art and Design organisation) funded the construction of a five-section dry stone wall and curved earth mound sculpture designed and built by artist Tim Jones and UK trained Master Waller Nathan Perkins. As well as this artwork Nathan also built a beautifully designed and crafted curved dry stone entrance wall to the site. Both structures were soon to become the talk of the local fund-raising volunteers and arts community, that on completion in the mid 1990s, were widely revered and celebrated with bagpipe tunes at the Scottish-themed launch event.

In so many respects those early, subsequent and more recent days have been touched by serendipity. Well before the formation of the DSWAA and a clear recognition that Australia's dry stone structures were worthy of protection, on so many occasions the right person, event or funding submission possibility came along at the right time.

By 1991 Nathan had returned to Australia after twelve months on a Queen Elizabeth scholarship where he had undertaken dry stone walling courses throughout the United Kingdom.

In conversation with Geoff Duggan, who undertook his initial weekend dry stone walling course with Nathan, we would both agree that much of the resurgence of the dry stone craft in Australia can be traced back to and attributed to Nathan.



Looking back, the facilitation and construction of that curved Gatehouse wall (above) was to change the direction of my life. I had decided to spend some of my rostered days off with Nathan, climbing over piles of stones to find just the stone that would fit. Challenging, dangerous and fun, his artisan walling skills were awe inspiring. A sheer delight. It was then I realised that for me, the dry stone craft when executed beautifully is pure art. I still have fond memories of lunching with him and his dog and

poring over the Victorian Road Atlas I had purchased especially so he could mark in pink highlighter the areas to visit to see other walls in Victoria .

Long before the days of digital cameras, smart phones, Google search engines and Airbnb the Royal Automobile Club of Victoria published a list of available accommodation in rural areas. By now I had decided on a new hobby, to try to find and photograph some of the highlighted walls in my newly marked Road Atlas.

By chance my bed-and-breakfast accommodation on a working farm outside Lismore in the Camperdown area would again prove invaluable. Dedicated farmers, generous and wonderful hosts, the Deans with whom I eventually stayed for some years had key contacts with other farmers, were interested in and had knowledge of sites for the best photographic opportunities for the dry stone walls in the area. Little did I know back then, that those photographs initially taken for fun as a hobby, I would eventually come to use for a variety of dry stone protection, preservation and heritage recognition purposes.

Birth of the DSWAA

Significantly among those photographs, was one that in early 2002 over a coffee chat with past DSWAA Secretary Andrew Miller in Ballarat, led me to initiate and discuss the idea to form a Dry Stone Walls Association of Australia (DSWAA). At that time, I had recently learned that I was the fortunate recipient of an Ian Potter Foundation grant to present a paper later in the year, at the 8th biennial Pierre Seche Dry Stone Walling Congress to be held in Visp, Switzerland.

The idea to form a DSWAA was not new, however I thought it would be fortuitous to try to fast track it, so that on the world stage, Australia could be recognised as a professional organisation. Already in the public domain the formation of a DSWAA idea was one among the recommendations I'd made on Panel 13 of the 1999-2004 touring A Stone Upon A Stone (ASUAS) exhibition funded by the Federal Government's Visions of Australia Program. Captioned: 'Dry stone walls...the future...' The link to the full list can be found on the [DSWAA website](#).

Little did I know where those early hobby Camperdown area photographs would take me. In 1992 there were 65 cities in Victoria. By 1994 around the time when the Overnewton Gatehouse development was complete the Kennett government had dissolved 210 councils, sacked 1600 elected Councilors, and created 78 new councils through amalgamations. People were searching for new futures and the Australia Council was funding professional development initiatives.

Reflections (*cont.*)

Lake District

As well as the Gatehouse project and with the idea of dry stone structures becoming a prominent feature for the then City of Keilor, I was in the initial stages of dialoging with Parks Victoria to develop a dry stone sculpture Park at nearby Brimbank Park, formerly the early settler Dodds family farm, also home to some of the area's dry stone walls.

The timing was right, the ducks were lined up. I was aware of the fame of Andy Goldsworthy's *Taking a Wall for a Walk* located in the Grizedale Forest Sculpture Park, a working Forestry Commission Forest near Hawkeshead in Cumbria UK. So it was that I was that I was able to use some of those early Camperdown photos together with the Gatehouse development story to apply for an Australia Council Professional Development Grant: a five month period in the English Lake District, National Park, otherwise known as dry stone heaven.



Gate on route to Grizedale Forest

However, even at this time and although I had recognised and appreciated the variety of wall styles in the Camperdown area, I had still not embraced the bigger picture regarding the need to protect, preserve and promote the heritage of walls and the craft of walling for future generations. Yet it was from there, whilst driving to the Forest each day through the maze of dry stone

wall-hugging narrow roads that I began to realise how important Australia's walls were to the shaping of our own cultural landscape.

In telling this story I keep reminding myself that these were the pre-internet days and the fax that arrived to my City of Keilor workplace would completely influence the outcome of the Grizedale experience. In it the owners of a renovated 11th century farmhouse in the Rusland Valley hamlet were offering me the rental of their home on the condition I took it for the whole period I was in the UK. This, by-chance change in arrangements proved prophetic in opening up unplanned opportunities pivotal in my decision to return to Australia and to try to raise the profile of Australia's dry stone walls.

The Forestry Commission hosts were key. They set up rich learning opportunities and contacts for me to spend time with the British Dry Stone Walling Association, the County Public Arts Officer and with Andy Goldsworthy during 1996 Cumbria year of Visual Arts [Sheepfold project](#) on Redmire Farm in Mungrisedale. And so it was, that in the homeland of Australia's early dry stone settlers and latter day craftspeople I learned so much. Leaving Cumbria was hard but I returned home, determined to accept one of the redundancy packages on offer and to try to do something, though I knew not what, about our walls.

On the journey to try to protect, preserve and promote the heritage of walls and the craft of walling for future generations it's been hard to determine here what and who to include and what and who to leave out. Where a story that doesn't have an end, ends. Generous and key people still to acknowledge, important places and studies still to report on, the networks established and information gathered at international presentations, the formation and ongoing dedication of the DSWAA committee, members and friends and the recognition of the small group of craftspeople committed to ensure the craft survives for future generations.



Bridge near Ambleside
Lake District, Cumbria

Discovering more *borries* Andrew Miller, DSWAA committee



In Edition #30 of *The Flag Stone* I shared the story of travelling through southern France in 2014 and passing a sign post to *Village des Bories* near Gordes in the Vaucluse. We had been enjoying stops at various dry stone walls in the region but a whole village of walls, dwellings and barns, all in dry stone construction was a wonderful find! The *Village des Bories* was an outstanding example of heritage restoration and is classed as a historic monument. *Borie* is a French word for a small dwelling or shelter built in dry-stone technique and comes from the Latin word, *Boaria* meaning 'oxen stable' or type of shed .

Since that visit to the *Village de Bories* we have enjoyed reading and learning more about the *borie* and the role these extraordinary structures played in the cultural landscapes across France and Europe.

Returning to this same region of France recently, where wandering the 'back roads' often forms part of our style of travel, we made part of our purpose 'discovering more *bories*'. And how rewarding that was! The landscape was typically open farmland, interspersed with forested areas and limestone outcrops. It is the limestone or calcareous geology, that provided the raw material for the construction of the *bories* and associated structures.

Travelling the back roads, some indicators of the potential presence of *bories* in the forests were the field stone on the ground, existence of dry stone walls (or remnants of walls) and sometimes just an innate feeling that 'perhaps there's a *borie* in that forest somewhere'! How successful this basic methodology was!

Discovering a *borie* we would always sit back and appreciate the structure in the surrounding landscape. Questions such as who built it, who had lived here, was it a family shelter or was it a shelter for people who worked the adjacent land these thoughts and others, passed through our minds.

The *bories* mostly had a single doorway and no other openings, other than a circular opening at the top of the conical-shaped roof for ventilation; the *bories* occasionally contained evidence of an open fire on the floor for heating or cooking purposes. Sometimes there were recesses into the internal walls for storage or protruding cantilevered stones to provide a rudimentary shelf.



On entering a *borie* there was always a sense of privilege tread lightly and enjoy the ambience of the space and the centuries old dry stone construction. Occasionally there would be shards of materials indicating former human activity. Two

interesting shards were a remnant of a spade and the other was a short length of bone, clearly cut to fit into a soup pot!

We left the region and headed to Paris on the TGV rail, however before we departed Avignon we paused to enjoy a local *broccante* (flea market). On one of the stall-holder's tables I opened a folder of documents which revealed a collection of French landscape drawings, all signed and dated around 1960. Amongst the drawings was a wonderful small sketch of a *borie*! A small investment has ensured the folder came with me back to Australia! I share the drawing of the *borie* with you here!



Limestone walls on a grand scale *Bruce Munday*



The Minninglow Embankment – a 300 m x 16 m high free-standing dry stone wall

The 27km High Peak Trail (formerly a rail line) in the Derbyshire Peak District is part of the National Cycle Network. Joining the Tissington Trail (21km) it is a route through some of the most spectacular limestone dry stone walling in the UK.

The High Peak Railway line was opened in 1831, one of the first railway lines in the world and one of the most challenging. Its purpose was to provide a 'short cut' to transport limestone and lime across England, mainly for land improvement following the enclosures Acts, but also as flux in iron furnaces. The railway would also take cotton to the world's first water-powered spinning mill at Cromford and finished product back to Manchester.¹ So steep were some sections (gradients as much as 1 in 7!) that traction locomotives had to be hauled by horses and later by stationary engines (designed and built by George Stephenson, the 'Father of Railways').



Viaducts and cuttings were built to obviate some of the testing terrain. The Minninglow Embankment (c. 1825) is a stunning example. Built drystone from rubble limestone it is almost 300m long and up to 16m high. The embankment is described as dual pitch, referring to the buttresses on either side of the arched opening through the wall. As if to show that this is no fluke, there is another viaduct/embankment of comparable dimensions only a few kilometres along the track.

Whether these are actually viaducts or embankments is a moot point. Neither is listed on [ViaductsUK](#) and at first



site their solid profile might suggest they are embankments. The consensus seems to be that an embankment is a 'filled-in viaduct', but each of these structures is punctuated with a large arched tunnel providing access (and drainage) to the other side. In each case the arch is actually a double arch, the inside one being mortared.

Some casual visitors viewing the structure from inside the curve are so distracted by its magnitude that they come away believing it is a retaining wall or an abutment. The tunnel of course is a reminder that this is a free standing wall.

Limestone walls (cont.)

The massive quantities of building stone were sourced from nearby quarries and from the several cuttings along the route.

Oddly, the railway which was first built to connect the Cromford and Peak Forest canals lost some of its relevance as other railways displaced the canals as transport routes. Nonetheless, it continued to be used to transport minerals, particularly lime. Many of the old quarry workings can be seen from the trail, along with old lime kilns of which few seem to have any conservation status.



Old dry stone lime kiln by the trail

Despite the challenging route and the novel technology there were few accidents, but those few were spectacular. In 1888 a wagon loaded with lime and a brake van containing gunpowder broke free from a train, hurtling down the incline at speeds reaching 200km/h. Failing to take the bend at the bottom, they then ran across the land, jumping both the canal (damaging the bank) and the double tracks of the Midland Railway before one of the gunpowder canisters exploded in the adjacent field. Minutes later the London passenger train passed.



The old and the new. The old stone windmill tower is undoubtedly mortared but nonetheless part of the stone wall ambience that pervades this part of the world. There is a fully restored windmill not far away at [Heage](#).

Wirksworth, an historic town of barely 6000 people, is within reasonably easy walking and very easy cycling distance of Middleton Top where the engine house contains a beam engine once used to raise and lower wagons up the incline on the High Peak Trail. It also provides convenient access to the [National Stone Centre](#), an 18 hectare site with an interpretive centre, a dry stone wall training site and the wonderful Millennium Wall showcasing dry stone and styles from across the UK.

I am indebted to David Haspel for showing me around the Stone Centre (and many other dry stone wall sites) and insisting that I ride the wonderful High Peak and Tissington Trails.

¹ *Richard Arkwright built one of the first real factories at Cromford in 1771 where he employed people to operate machinery – an utterly new concept – powered by a waterwheel. The factory also ushered in ‘vertical integration’,*



A lower section of the embankment showing where a parapet was added when the railway was converted to a walking/cycling trail.

No running joints here!

Tech note: Running joints *Geoff Duggan, DSWAA committee*



How many running joints (among other errors) in this wall ?

There are several basic principles we follow when building a dry stone wall. For the purpose of this article we will focus on just one of them. "One stone over two and two stones over one below". Crossing joints in the courses below prevents what we call running joints. A running joint is a line of weakness running past more than two courses of stone in the face of the wall. This line of weakness occurs when correct bonding technique has not been used in construction. However, when larger stones in the wall need to be built up against or over it may require several courses of stone to bring the wall up to level. In this instance it is not considered to be a running joint. This can happen when navigating around large foundation stones, large through stones or just simply larger stones in the face of the wall. It is more likely in random style walling and random coursed walling but rarely occurs in coursed walling styles.



Random coursed slate wall showing courses butting up against a "big Jumper"

The photograph shows how sometimes two or more stones are required in order to get around larger stones. When doing this it is important not to take the height of the last stone past the top of the larger stone, otherwise it is deemed a running joint.

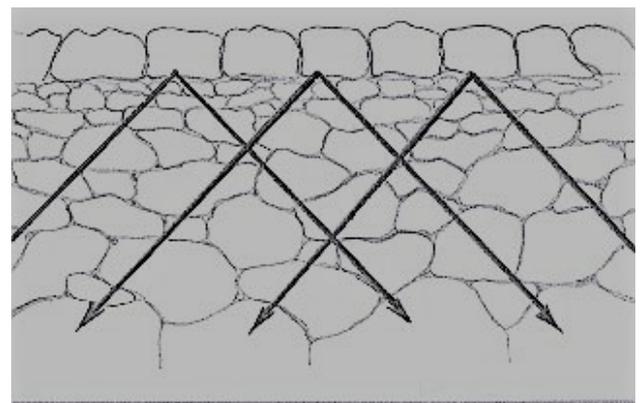
I often say that it is not what you see in a dry stone wall that makes it strong, it is what's buried inside. One of the exceptions though is evident running joints. Anyone who has had proper training in dry stone wall construction, whether amateur or professional, should be able to easily identify running joints.

An old Scottish Dyker's poem passed on to me many years ago by my mentor, Hugh Drysdale, goes something like:

Ne'er lay a stane abein a	Never lay a stone upon a
stane	stone
Lay yin abein twa	Lay one upon two
Pin it well and pack it well	Pin it well and pack it well
And soon ye'll hae a wa'	And soon you'll have a wall

In translation it describes the fundamental techniques of building a dry stone wall.

So when we are building a wall, this principle along with many others are always at the back of our mind with each stone we place. As the first course or row of stone is placed and the centre filled, we begin the second layer or row of stone. As each stone is placed, it should butt tightly against the neighbouring stone. Stones should be laid so that they cover the joint in the courses or layers below. In this way, the weight of the stone above is transferred to the two stones below and the stone above also ties the two stones together below.



Gravity and friction in action

When building a coursed wall it is important to match the height of the abutting stone so the joint can be covered when building the next row or course of stone above. This important principle is repeated as often as possible throughout construction.

Of course, there are always exceptions to the rule!

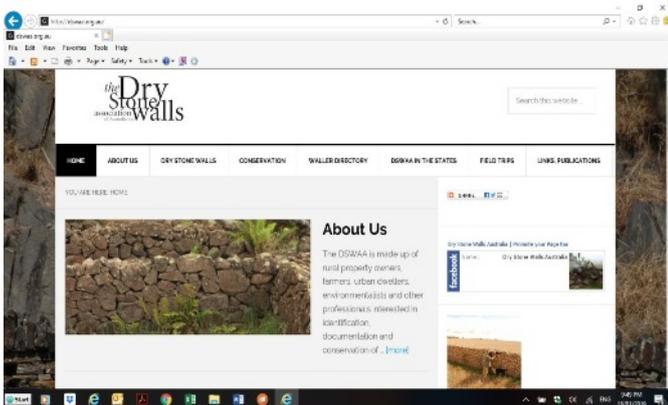
Key issues for DSWAA *Jim Holdsworth (DSWAA President)*

Turning the calendar to a new year means the closing of times past and a step into the uncertainties of the future. But taking a moment to look back provides some perspective on where we are as a voluntary organisation and where we've come from over the years since the Association was founded in Ballarat in 2002. But let's look back just a decade, and Issue number 15 of this journal.

What was engaging your Committee then? Well, there were several topics which, while still on our books today, have shown very pleasing progress.

In my President's Message back then I mentioned that a recent amendment to all municipal Planning Schemes in Victoria provided the statutory capacity for Councils to protect identified dry stone walls following the requisite research. That provision is not as broadly available in other States and its introduction by State governments beyond Victoria would be desirable. This is particularly so as one of our key Portfolio areas is the identification and protection of the nation's dry stone walls and structures. Nevertheless, the decade has seen some studies of dry stone walls and structures in various places and the protection of the most representative examples. Continuing to lead the field in this respect is the City of Melton; the venue for our field trip in November last year.

Another topic from 2009 was the intention to update our website and make it more interactive and topical. That has occurred and the website is our most important link to the wider community as well as our primary medium for communicating with membership, generating a steady stream of enquiries and comments.



Related to the website was the establishment of an on-line directory of practising wallers. While today's website lists a number of wallers the usefulness of the Directory is limited by issues of managing listed wallers with different levels of qualification, experience and competence. The Sub-committee formed several months ago to consider all aspects of training and accreditation, and subse-

quent listing in our Directory, has completed its work and will be making recommendations to your Committee in February. One outcome of this process will be, in due course, a more comprehensive and informative Directory.

In 2009 I mentioned field trips as a key activity. Over the last decade we have conducted about three field trips each year in many diverse locations in the four States where we are most active. Your Committee is aware that such events provide the opportunity for members and their friends to actively engage with the Association and to enjoy visit to places of interest; where seeking out dry stone walls is the catalyst for learning about the history, geology and people of a particular place, and of getting together with other members.

These 2009 topics – protecting key walls, having an effective website, having a useful waller directory, conducting field trips – remain cornerstones of the Association's existence as much today as they did then. Since 2009 we have expanded our scope to embrace assistance to wall owners, promoting the accreditation and training of professional wallers, advocating for dry stone walls and structures among relevant stakeholder groups, and responsible financial management

In another decade, someone may look back at what was occupying the Association in 2019 and reflect on how far it has come since then. I hope that reflection is satisfying.

The Association's vision is that dry stone walls and dry stone structures are widely accepted for their unique place in the history, culture and economy of the nation and for the legacy they represent.

Our goals are:

- *That governments and the wider community recognise the significance of dry-stone structures built by indigenous peoples, European explorers, early settlers and modern craftspeople as valued artefacts of our national identity.*
- *That this acceptance is manifested by appropriate statutory protection and landowner and community respect and celebration.*
- *That the craft of dry-stone walling grows as a modern reinforcement of the contribution that dry stone walls and structures have made to the culture of Australia.*

Editor's notes *Bruce Munday*

Nice to finish on a positive note: the wonderful heritage-listed Cut Hill dry stone wall near Victor Harbor (SA) has finally been repaired, fifteen months after it was damaged (twice) by truant motor vehicles.

We would like to think that the high standard of the repair work is to some extent a result of consistent pressure from DSWAA on the Department of Planning, Transport and Infrastructure, a strong campaign by a concerned community and representation to the local Member of Parliament.

Our correspondent in New Hampshire, Bill Asby, sent through an indispensable document for anyone interested in dry stone structures: *Historic Stone Highway Culverts in New Hampshire; Asset Management Manual*.

This 64 page document, published 2009, tells the reader absolutely everything one needs to know about identifying, maintaining and repairing historic (not just dry) stone culverts. It also describes public and private initiatives in this space and how others (including local government employees and contractors) can get involved. Clearly the principles applied to culverts could be extended to just about any dry stone structure of historic value.

Of dry stone culverts it says: 'The lack of mortar provided porosity to the structure that allowed water in the backfill to drain out through the faces thereby reducing hydraulic pressure on the masonry and the damaging effects of frost and ice. The lack of mortar also allowed the stones to move slightly, giving the structure an overall flexibility that some argue is an advantage when subjected to excessive live loads, impact loads or vibration that can fracture and pulverize mortar in some cases.' There is now a link to the document on our website.

Finally, if you have an hour or so to spare, take a look at the remarkable work of Thea Alvin.



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Membership

Annual membership fee

Corporate	\$80;	Professional	\$50
Single	\$30 (\$80 for 3 years)		
Family	\$50 (\$130 for 3 years)		

Cheque: DSWAA Inc. and posted to DSWAA Membership, 87 Esplanade West, Port Melbourne 3207; **or**

Bank Deposit at any branch of the ANZ Bank **or EFT:** BSB 013 373, Ac. no. 4997 47356

Clearly indicate membership identity of payer

New members

Complete the online membership form on our [website](#): Alternatively email or post name, address, phone number/s, and area of interest (eg waller, farmer, heritage, etc) to the membership secretary (above).

Renewals

Annual fees are due May 31 after the first full year of membership. We send renewal notices prior to this.

Photos

P 1	L Allison
P 2, 3	S Hodgson
P 4	L Allison
P 5, 6	L Noble
P 7, 8 (top)	B Munday
P 8 (bottom), 9, 10	R Marshall
P 11	A Miller
P 12, 13	B Munday
P 14	G Duggan
P 16	T Alvin (website)