

Laurie Atkins (President DSWAA)



Nature's dry stone wall

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Welcome to this milestone edition of *The Flag Stone*.

This edition coincides with the halfway point in the DSWAA year, and we, like just about everyone, feel especially as if it has been significantly constrained by you-know-what. Our historically well supported field days had to be postponed and while this gave the impression of a hiatus in activity, the DSWAA Committee continues to work on planning and administrative matters. The DSWAA is very much looking forward to when field days can return in safety, developing ideas for members to pursue their interests in dry stone walls and establishing policy and practices that strengthen the DSWAA for the future. I thank the Committee for their perseverance during this period of uncertainty and of course the members for their on-going support of the Association.

At this stage we are hoping to 'resurrect' the SA field weekend, probably in mid-late March or April between Easter and Anzac. It is difficult to plan events with any certainty so please keep your eyes open for the *DSWAA eNews* in your in-box.

This edition of *The Flag Stone* is a credit to the current editor, Bruce Munday, and a fifty-edition run is a wonderful gift from all those who served the Association in this role since its inception. Of course it would not be what it is without the contributions of those who have provided their thoughts and photographs—the professional and amateur wallers, custodians, historians, adventurers and travellers.

Back copies of *The Flag Stone* are available on the DSWAA website, so I suggest, after you have read this edition cover to cover, have a look back at earlier editions for a great insight into dry stone construction and the DSWAA over the years.

This edition again provides a diverse range of articles which cover *The Flag Stone*, personal journeys, history, women's involvement in walling, technical notes and literary contributions.

Read on!

Fifty issues of *The Flag Stone*

Jim Holdsworth (DSWAA Committee)



Newsletter No. 1 June 2004

Dry Stone Walls are exciting! Who would have thought that something we take for granted, and that some of us see every day, could have grabbed our interest? We now have an Association, and are proud to invite you to be part of a journey of discovery into an old and esteemed craft which has given us such a rich heritage in Australia, and will continue to enthuse us as we discover the endless uses of stones, placed together, one onto another, (in many instances standing alone) without mortar to hold them together!

For many of us, interest in The Dry Stone Walls Association of Australia was fostered by Raelene Marshall, whose passion for stones and the uses to which they have been put over the centuries led her to enquire and seek examples of the pioneers' efforts in Victoria and elsewhere in Australia. Raelene's endless enthusiasm and knowledge, which she has shared with so many of us, through the touring exhibition *A Stone Upon A Stone*, have high-lighted a latent interest in stone in many people, who are eager to know more about the stone structures they see around them and which cause all of us to ponder, "How did they get there?"

The DSWAA was formed following a public meeting of like-minded stone wall enthusiasts held in Ballarat, Victoria in July 2002. The Association now provides a formal opportunity to raise the profile of dry stone walls in rural settings, some located in out of the way places, some on private land,

Edited by Wendy Bitans

and some in public ownership. Members have been privileged to visit and inspect structures and buildings constructed in earlier times. Some of the sites we have visited have been neglected but are now newly discovered by their owners and appreciated for the skill with which they were built, and as evidence of a craft and way of life now gone.

Fortunately, in these modern times, we have enthusiastic practitioners of the art of stone-walling, eager to learn and share their growing knowledge of stone wall construction, and their admiration of the beauty and strength of stones. Members of the DSWAA have inspected many sites and are keen to encourage enthusiasm for stone constructions and conduct research into the uses and reasons for the construction of the wide range of walls and walling styles.

Did you know that "stonewall" is in the dictionary as a verb, and "to stonewall" (a person) means to obstruct?

Member notes. Our members are a diverse lot, with many interests. John Collier of Lismore is featured in the Weekly Times of February 11, 2004 with a photo and article. Members will remember the fascinating walls on John's property, which we visited in 2003. John's concerns about foot soreness of cattle have been published, and will have raised awareness amongst cattle handlers, producers and buyers of the problems caused by concrete floored saleyards.

Wendy Bitans edited Newsletters 1 and 2; each three modest A4 pages in black and white, stapled at the corner and posted or emailed to members. Issues 3, 4 and 5 were edited by Raelene Marshall (assisted with Issue 3 by Anne Mulholland). For Issue 6, Charmian Brent, a member with some publishing skills, took over and 'The Flag Stone' as we now know it was born.

Where did the name come from? In May 2005 a call went out for members to propose names for our newsletter. Forty-six suggestions were received and these were put to a vote at the July committee meeting. A passionate advocacy for his nomination by the late John Collier carried the day, leaving other worthy suggestions such as Cowan's Chronicle, Stone News and Wall Paper in its wake.

Charmian edited a total of 27 issues from No. 6 (February 2006) to No. 32 (September 2014) when ill health intervened and Charmian resigned from the Association. Bruce Munday, claiming reluctance to do so, filled the large boots left by Charmian, and has edited every issue since.

As the website grew in breadth and readership, the role of *The Flag Stone* has evolved to the point where it now stands as an enduring record of the Association's activities as well as a journal of ever-engaging stories of dry stone walls and structures from around the world. Contributors have come from many quarters; members and non-members, professional wallers, historians, farmers and friends of the Association who happened upon dry stone walls in amazing places and wanted to tell their stories in words and photographs. Most issues ran to 12 pages, then 16 became the norm until recently the average is 20 pages.

Our Editor has maintained an exceptional standard. His powers of coercion and encouragement are not to be denied by contributors as the deadline for contributions looms three times a year. His ability to source stories, photo essays, articles or snippets seems unending, much to the delight and education of the readership.

Of the various ways we communicate with our members and the wider community, *The Flag Stone* occupies a valued and indispensable place in the life of the entity that is our Association. I hope that the next fifty issues are as readable and as valuable a record as the first fifty.

For a larger image of Issue 1 click [here](#)

What defines an Association like ours? Having been on the Committee for nearly twenty years, contemplating this question brings many answers to mind. There is no doubt that a defining aspect is the membership and how our members participate, contribute and give the Association its very reason for existence. Our Vision and Statement of Purposes is another cornerstone. For the public, opening our website enables the visitor, wherever they are in the world, to get a glimpse of what we do. I place great importance on the benefit to members that comes from our meetings and field trips. All of the above come under the umbrella of 'communication and interaction' but none has the enduring and embracing effect of this publication you're now reading.

Two years after the Association was formed one chilly day in June 2002 in Ballarat one of our founding members, farmer Wendy Bitans, produced Newsletter No. 1 which she headed with the exclamation that 'Dry Stone Walls are exciting!'. Fifty issues later, and what we now know as 'The Flag Stone', that statement has proven prophetic and is constantly reinforced. At an average of 12 stories or articles in each issue, that's a mighty 600 topics sourced, edited, illustrated and then read, enjoyed and appreciated.

A Father & Son's Walling Journey

Antony and Jono Veale (DSWAA members)



Antony Veale (left) attended a DSWAA beginners workshop in SA in 2018. Working in Alice Springs at the time, he was able to attend only one day of the weekend event, but returned six months later to make up the missed day—and he brought son Jono with him.

Clearly these two were going to be serious wallers, so I asked them to share their story for The Flag Stone.

The first wall

In December of 2013 father (Antony) and son (Jono) having long admired stone walls decided to attempt a dry stone wall for themselves. That wall was a single skin of local limestone, fashioned into rustic blocks from limestone slabs recovered from nearby vineyards



*First limestone wall (2013 AD) * Handsome partially clad Welshman for scale**

Training and Inspiration

Having spent the next few years both enjoying the wall and considering how it could be improved, father and son decided some measure of training might be in order. With this in mind, both enrolled in the weekend course run by the DSWAA. The course (*photo at top of page*) provided us much of the basic learnings of the ancients: setting out frames, building opposing walls, running level courses, breaking joints, setting through-stones and locking in cope stones.

Armed with this knowledge, Antony planned on doing all the dry stone landscaping for the house he and his wife Bronnie were building. Following consultation with Jon Moore, the course instructor, he realized the scope of the task was well beyond what could reasonably be done in the time available and so he contracted Jon. The result (*below*), a bluestone staircase rising through several dry Carey Gully sandstone walls, has enormous visual impact.



Having now seen a professional level project brought to reality, Jono was filled with an inspiration underpinned by the dangerous combination of inexperience and optimism.

Neweys Road—Front wall project

The pitch was simple and sounded a sure bet - "*Should be a pretty straightforward wall Dad – about 14m long, 1m high and maybe we can put a curve on the end!*"

The 'old wall' was mortared and mostly pushed over by a pair of large Norfolk Island pines with the assistance of a

Walling Journey (cont.)

small oak tree. As we would soon learn, even before the first stone was set: if you rebuild a wall that has been previously damaged by trees – expect significant hard-ship in site preparation. In all we spent three 5-6 hour days to demolish the old wall, dig out the footings and remove some very substantial tree roots.



The prepped job site (finally)

Next, we needed some stone so Jono went to Carey Gully to check out the different offerings. He settled on 13t of a large product called of '2-man Wallers'. His thinking was that large stones would give us some flexibility with course heights and would produce a good visual effect. Now it should come as no surprise to readers that the main problem with big stones is that they are heavy! The closest that the truck could deliver the stone was on the verge on the other side the road. This meant the last 20m of the stone's journey to the job site were traversed with in either a sack truck or a wheel barrow. By jobs end a further 13t delivery would be needed to finish the wall.



Progress shot after two courses

At last we started laying! The first course took us 3 x 5 hour afternoons to complete. Having toiled away setting the foundation course we thought we might start speeding up. In reality, we didn't achieve that long-promised productivity uplift, but we did find that the quality of our work improved course by course and we achieved tighter joints.

Drawing on the knowledge from our walling course we were keen to set plenty of through stones to ensure the wall had decent structural integrity. We ended up setting the through stones at 1.5m spacing on the third and fifth courses. We opted for the flush look on the front of the wall but poked the overhang through on the back wall.



Progress shot of first lot of through stones

One of the great pleasures we did not anticipate was how much interest the wall building would generate from passing walkers. Lots of people would regularly stop and make agreeable comments and pass on words of encouragement. In all Jono had three firm job offers from passers-by. One particularly generous enquirer asked Antony whether he was a stone mason (?/!), to which he gave a blushing denial. On a separate occasion Antony was at work one day chatting with his 'boss' about the weekend and remarked he spent much of it working on a dry stone wall. Antony's boss asked to see a photo then, and once seen immediately retorted "I know that wall... I walk past it several times a week!!"

As we neared completion of the sixth and final course, it became clear that we would have quite a lot of offcuts and hearting left over—Antony had been disparagingly referring to the growing pile as the 'ugly ducklings'. Given this, we decided to build gabion cages to edge the adjoining garden beds. We were both pleased with the effect that these produced tying the gardens in with the wall.

Walling Journey (cont.)



Gabions constructed from 'the ugly ducklings'

One of the features that we spent a lot of time trying to get right was the headstones that are visible from the road. Each course alternates with through stones and



ties back into the wall that interlock. The head of the wall is finished off with 2 large top stones against which the coping stones directly abut (see left).



To achieve the desired neat effect along the wall and to break down some of the larger stones, we drilled and split some of the stone using wedge and feathers (shims) as we had learned in the course. This process (see below) worked well and

allows us to 'uncover' fine stone surfaces, as well as provide some texture and contrast along the wall.

Finally, the wall was finished off with large (350-400mm) vertical coping stones that were hand-picked and worked up at Carey Gully. This was one part of the process that was especially satisfying as progress was relatively fast and the final stones are now tightly 'locked' into place and are not going anywhere.



Walling Journey (*cont.*)

Expanding ambitions—megalthic limestone armaments

Fired by a renewed confidence and well before we had finished Jono's wall, we opened up a new front at our shack up the river. We had to replace the fence and gate at the entrance to the property for unrelated reasons and we decided to build some dry stone feature walls for either side of the new gate.

Antony spoke with a local contact about getting some suitable limestone for the job. The contact advised the pieces were rather large... and so Antony sought an opinion from Jono to confirm suitability of the rock. When eventually, we turned up to the shack to begin the job, we found megalthic limestone slabs! A number of them were approximately circular with a diameter of >1.5m and about 400mm thick. A back of the envelope calculation indicates that many weighed significantly more than a tonne. To 'shape' them down into usable pieces, we used a demolition hammer, but even so it took quite some time to reduce them and there was a lower limit for how small this could be done accurately. Even the smaller pieces were still too heavy to move with a sack truck, so recalling past successful approaches, we attempted the 'Egyptian Method' for transporting heavy stone



Was this really how they built the pyramids?

Having positioned about three of the footing stones with this method, it was soon apparent we were going to need technology more advanced than 3 old fence posts as we didn't have 10,000 slaves to help us shoulder the load. There was no way we were going to be able to lift any of the stones for the second course without chopping them up into much smaller pieces, which was proving difficult with our 'shaping' method. Fortunately, our neighbour wandered by and thoughtfully asked us if we thought a front-end loader with a set of forks might not be useful?? After hurriedly working out how many cartons of beer we would owe him, we accepted the gracious offer and were back in business.

Even with the fork lift working with such large stones was quite challenging but the rugged result fits in well with the limestone cliffs that are ubiquitous in the area.

Once again people made many generous comments about how good the walls looked and how appropriate they are for the setting. We did go to a lot of trouble digging footings into the river sand and made the first course wide (~1100mm) because the area is prone to inundation when the river floods. Time will tell if our design copes with flood. One thing we are sure is that if the wall does fall over in a flood the stones won't go far!!



Completed foundation course on right-side



Progress on the second course

The wall was finished with 3 horizontally laid courses and a row of large coping stones. We did find that the limestone presented a couple of new challenges in comparison to the sandstone that we were more familiar working with. In particular, there were no reliable bedding planes to break the stone along, and the stone

Walling Journey *(cont.)*



Completed wall as viewed from the road

had a tendency to shatter rather than to break in a more or less predictable manner.

One unexpected bonus was that in splitting the stone we were able to expose a number of interesting fossilised shells that are now proudly displayed in prominent outward facing positions along the wall.

Final words

We hope that the above account provides other would-be-wallers with some encouragement that with effort and perseverance it is possible to build pleasing walls with very limited experience. Failing that, we hope that the above provides more experienced Wallers with some amusement to hear the tales of inexperience and perhaps might even provide a gentle nudge to attempt “just one last project...”

As for our future, Jono has plans for stone amphitheatre enclosing a fire pit in his back yard. These plans however will need to wait as 2021 has been declared a ‘rest year’ owing to the recent arrival of baby Harrison James just before Christmas.

A final word of thanks to Jon Moore and the Dry Stone Walls Association (DSWAA); their course fostered our enthusiasm and equipped us to take on far more ambitious projects than we otherwise would have – to anyone considering it – could not recommend it more highly!!!



Where it all started

The arch only stands because all the stones seek to fall at once

Attributed to Heinrich von Kleist reflecting on the devastating 1647 Santiago earthquake
I've been surprised how elastic an arch is. Even those that move in the wind show enormous tenacity before falling. Movement is their strength.

Andy Goldsworthy

Versatile dry stone construction

—Laurie Atkins (DSWAA President)

I've spent a lot of time in and around Lorne, Victoria but only recently have I appreciated the nearby application of dry-stone construction in a truly contemporary setting. Just out of Lorne on the Allenvale Road, nestled in a natural amphitheatre can be found Qdos Arts. Here the founder, Graeme Wilke OAM, and David Long, well known in dry stone walling circles, have created a number of structures over recent times that unite the site's creative and functional fabric.

Wilke founded the arts venue in 1987 and has developed the site into the fine arts and sculpture park of today. The site started as a house in a small clearing in the bush. Now, Qdos comprises a pottery studio, a fine arts gallery, sculptures at large, accommodation and a café using seasonal produce from their kitchen garden. Development of the site, both physically and aesthetically, has involved the creation of driveways, paths and stairways connecting the facilities. Wilke has used massive basalt stones, carefully placed to interlock, to face the many embankments. Although the stone is not local in origin, the passage of time has softened their appearance and made them look completely at home.



Quarried throughstones sit proud of the wall face

Sitting below the pottery studio now stands a large hot house, the contents of which service the café with seasonal produce. The superstructure sits on a double-skin wall on which a concrete cope provides structural stability to the wall as well as a solid anchor for the steel frame.



Massive stones retain a bank

There is an often-used business model for building walls where a short course is conducted under the tutelage of an expert waller, participants learn the basics of walling technique while providing their labour and the site owner gets the benefit of the resulting structure. This approach was used at Qdos where a small retaining wall was "workshopped" along a driveway to the hot house. This is more of what we expect in a dry stone retaining wall: basalt field stone, consistent batter, vertical coping and quarried throughstones.

The throughstones have been made a feature of the structure by placing them proud of the face stones. Being quarried, the throughstones are angular and contrast with the rounded fieldstone.



The Qdos hot house

In 2013 I participated in a dry stone walling workshop conducted by David to build one of the hot house walls. Was it irony that the two day event was so wet overhead and underfoot? Well the Otway Ranges are covered by rainforest for a reason. At the time it was difficult to imagine what the finished project would look like but with the many visits since I've had the pleasure of seeing the plan come to fruition.

Versatile dry stone *(cont.)*



David Long directing traffic at the 2013 workshop

Graeme has trained in studios around the world and has over 40 years of professional experience. His passion for art has evolved into a multi-disciplined practice from oil painting, sculptural works to large-scale ceramics. His vision for promoting the arts to the community did not stop at the boundary of Qdos. In 2006 he marshalled a group of like-minded people to pursue the establishment and ongoing conduct of the Lorne Sculpture Exhibition. The exhibition is run biennially and displays works along the Lorne foreshore from the pier to the river mouth as well as in other selected locations around town, with prizes in a variety of categories.

I caught up with David Long recently to talk about his interests in dry-stone and particularly his sculptures.

David started his career in the landscape gardening and landscaping business. In the late 90s, inspired by Nathan Perkins who had returned from overseas with DSWA(UK) Master Craftsman qualifications, he worked on projects with him and practised his walling skills in the heart of the Newer Volcanic Precinct in Victoria.

David's career and commissions have been frequently documented and celebrated in *The Flag Stone*: Terang

entrance wall (TFS #26), Volcano Genesis Melton (TFS #34), the many short courses conducted with Alistair Tune under the ISSI (TFS #24), the Chelsea Flower Show with Tune (TFS #30 & 48) and quite a few more. In 1999, he took a commission to build a monstrous wall on a private property on the Mornington Peninsula (TFS #45). This arguably still ranks as the tallest free-standing dry stone wall in Victoria and possibly Australia. In 2002 he was chosen for an International Specialised Skills Institute Fellowship in Dry Stone Walling.

David Long was an accomplished dry stone waller when he went down to Lorne to pursue another interest; competing in the famous Pier to Pub open water swim. After the event he noticed the advertising for the inaugural Lorne Sculpture Exhibition and was light heartedly encouraged by his swimming compatriots. The idea of creative expression using his craft stuck in his mind and he decided to enter. In 2007 he won The Great Ocean Road Sculpture Award at the inaugural Lorne Sculpture Exhibition Inc with a dry stone sculpture titled *Revolution – whatever happened?* (TFS #12, p.10; TFS #22, p 14). David is typically unassuming in relating his success in his first exhibition and his other accomplishments. Since

Versatile dry stone (Cont.)

then he has been a frequent entrant in the Lorne Sculpture Exhibition with *A X Culture* in 2009, *Earth Murmurs* in 2011, *Tendency to complexity* in 2014 and *Shelter* in 2018.

Many of Long's sculptures are inspired by themes around environmental stewardship. He explains that working with stone has given him the feeling of connection to the environment. While discussing *Dream Serpent*, he spoke about knowing the provenance of the stone he used often magnified these feelings; fieldstone laying undisturbed, gathered and built into a wall: pushed over into a rubble pile, selected for use and reconfigured as this sculpture.

Two of David's dry stone sculptures are featured in the Qdos sculpture park.

Silent Witness, (TFS #36, p.14) is a henge-like circle of basalt blocks facing inward to a large central stone. The stones forming the circle have rudimentary faces and allude to people watching with inaction on an issue which is central to the onlookers' common interest.



A portion of Silent Witness

The *Dream Serpent* curves around the margins of a pond and behind a performance space in the centre of Qdos. Long designed and built a serpentine body to complement an existing sculpture of a mythical serpent. The body recurves around some large river-worn boulders symbolising the serpent protecting her precious eggs.

There is a tendency to take for granted the technical requirements which enable the use of dry stone as a medium for artistic expression and just engage the visual and emotional senses. The sculpture has two inflexion points in its curvature and the height undulates from end to end. Maintaining a consistent batter required the

build to accommodate a variable foundation width and differences due to inside and outside curve dimensions. David explains that he wanted to give the impression of the body "floating" on the pond. At the time of my visit the pond was at a low level and some of the normally hidden features at the base of the wall were revealed.



Dream Serpent

David indicated the central part of the wall was built on large basalt stones which cantilevered over the pond. As insurance to achieve this concept, the build was deliberately "beefed up" on the bank side of the work to apply weight to balance the unsuspended side.



Sculpture cantilevered on large foundation stones

For my part, I am enthused by the many uses to which dry stone construction is put, from the utilitarian through to the creative and the technical abilities that enable such works to inform the human condition. I'd like to especially thank David Long and Graeme Wilkie for their time in support of this article.

Witchelina Rocks – *Bruce Munday*



Dry stone smithy and office at Old Mount Nor'West

A former pastoral property about eight hours drive north of Adelaide, Witchelina is now a conservation reserve owned and managed by Nature Foundation. At just over 4,200 sq km it is part of the National Reserve System, purchased in 2010 through the Australian Government's Caring for our Country initiative.

It is difficult to believe that European settlers thought (briefly) that they could grow cereal crops in this region and almost as unlikely run sheep and cattle. The total rainfall in 2019 was 25.8mm; the wettest year on record was 1989 with 420mm, 291mm falling in a single event.

Indigenous plants and animals are gradually returning to Witchelina but what has not changed is the geology that continues to attract international attention. Situated at the northern end of the huge Adelaidean Sedimentary Basin it also shows remnants of volcanic activity.

Driving through this landscape the dry stone walling enthusiast will spot in the distance what might seem to be long black stone walls marching to the horizon.



Closer we discover that these 'walls' were not man-made and have been there for geological time. They are ridges of fractured dolomite, originally laid down on the sandstone but now tilted almost vertical as the beds folded under immense pressure. As the land around erodes these barricade will become evermore prominent, looking for all the world like giant tilted dry stone wall.



Witchelina (cont.)

A gorge is always geologically revealing and Old Mount Nor'West Gorge is a classic, not only for geologists but for anyone interested in stone. Massive tilted layers of rusty brown, red, white and grey sandstones and siltstones seem to have been excavated by an unlikely torrent that once flowed through this arid landscape.

First there is the Broken Rock Wall, a thick bed of massive quartzite with horizontal and vertical fractures giving the appearance of rocks stacked tightly next to and above each other.



Then solid layers of bed-rock looking for all the world like pavers or perhaps weathered railway sleepers (*left*).

The sides of the gorge reveal almost vertical layers of siltstone and sandstone, representing different periods of deposition, reflecting significant climatic periods and each younger as one proceeds along the

gorge. This is where even amateur wallers lick their lips at cliffs and hillsides strewn with beautifully chiselled building stone. There are stones for every purpose including lintels, curves and creative features. For texture there are ripples, laminates, folds and crinkles.

Fortunately this beautiful pile of stone has been preserved as a geological feature, not pillaged as a resource. One reason might be that there was really not much European settler building activity in this very arid environment; the other is the hard quartzite barrier at the downstream end of the gorge, limiting wheeled access.

Sandstone 'building blocks' along the gorge—wouldn't you like a truck load of these!



Old Mount Nor'West Station was one of several pastoral leases that were amalgamated in the early 1900s to form the present-day Witchelina. The old homestead has been restored by Nature Foundation and many stone ruins at the station headquarters give an insight into life when they were shearing up to 30,000 sheep. Most of the stone buildings were lime mortared but the old office and smithy is dry stone save for a patch of mud mortar where a window opening has been partially repaired.



Stone lintel at office door and dry stone tank stand



Foundation stones in a dry stone wall

– Geoff Duggan (DSWAA Comm. Master Craftsman)



This article will deal with Foundation stones. As the name suggests, this is the foundation of the wall and if you don't get this right, you might as well stop walling as it will probably fail in a relatively short time. The foundation supports the wall above and forms the load bearing part of the wall on the ground surface.

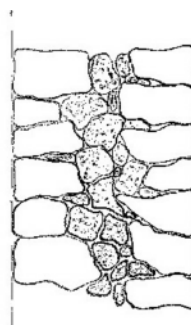
I describe Foundation stones or footings as probably the largest and 'ugliest' stones you will find in your stone pile or old wall, and having a relatively flat base. Their purpose is to disperse the weight of the wall over a large surface area and to provide a stable base to hold up and hold together the wall above. When sorting your stone or dismantling an old wall for a rebuild, these stones should be kept closest to and on either side of where the wall is to be constructed.

Preparing and laying foundations

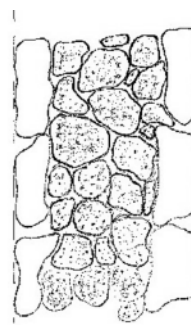
The foundation should be laid on solid ground. In most cases, it will require removing the turf sod and organic matter to reach a firm soil base. This will reduce excessive settling of the wall over time. String lines set up on a walling 'A' frame, or profile bars, will ensure the wall retains the correct dimensions, batter and finish (see TFS #48). Never allow any stones to touch the line when in their final position, as this will throw the line of the wall out and create a bulge in the face of the wall. However, some very large stone foundations may protrude from this

line providing a scarcement or be set off from the bottom line of the wall creating an even larger surface area for the weight of the wall to be distributed over.

As mentioned before, the foundation stones will be the largest and ugliest stones in your pile. Aim for a level top on the stone or a slight incline towards the centre of the wall; giving a sound base from which to continue building. The incline toward the middle of the wall should not be excessive. If the angle of incline goes beyond perpendicular to the batter (the face of the wall) they may be prone to being squeezed out (or orange pipped) from the mass of the wall above. Stones should butt up tight against each other and be laid, as much as possible, with the longest part of the stone going into the wall (referred to as 'end in, end out') and not along it ('trace walling').



✓ End-in, end-out



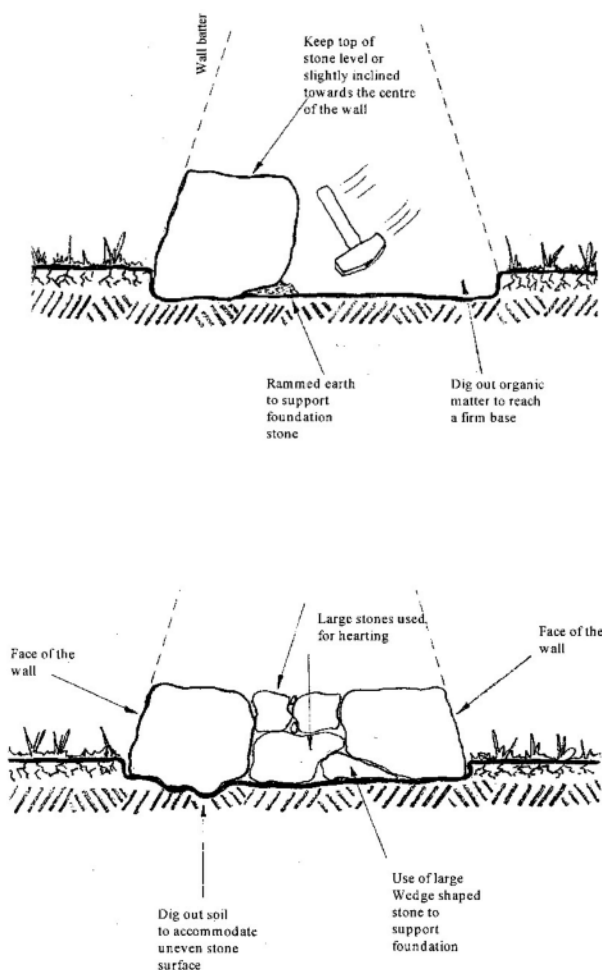
X Trace walling

Foundations (cont.)

This is an important principle to be repeated throughout the construction process. Stones laid in this way have further to travel out of the wall during any settling over time and are held in the wall more securely by friction between the neighbouring stones.

Techniques for preparing and laying foundations

A properly laid foundation should be stable enough to walk on without any of the stones moving. There are four main ways of doing this. The first and most ideal is to have a flat bottom of the foundation stone sitting firmly on to the flat surface of the prepared ground. However, this is not always possible. For very small voids, compacting or ramming earth up under the stone may be used. For larger bumps on the foundation under side, soil may need to be dug out or sculpted to accommodate these lumps. The final option is to use wedges, however these need to be as large as possible with a great deal of surface area to help distribute the wall mass. Small stones used in this instance can and will be pushed into the soil and weaken the structure.



Once the two outer faces of the foundation are laid, the void in the middle needs to be filled level. This is done using the principle of 'one hole, one stone', using the largest possible waste stones available to fill any of the voids until there are no more spaces left. This process reduces excessive settling and keeps the two outer faces apart. It is the inner strength of the wall and is known as the 'heart' of the wall. Do not be tempted to throw these stones in the middle, all stone should be placed on and in the wall with as much stone to surface contact as possible. Also, do not use sand, gravel or soil in the middle of the wall as this will cause excessive settling or will wash out during heavy rain, resulting in wall failure. Always keep the middle of the wall filled to the level of the outside stones: 'keep your heart up!'.



X Sand, gravel or soil

✓ One hole, one stone

I have at times used a heavily compacted road base after digging out the turf and roots to bring the base level higher. Some areas in the USA lay walls over a gravel filled trench. It is said to assist with ground frost heave and thaw, something I've never had to do and glad of it.



Large foundation stones laid over compacted road base

Photographs on the following page show examples of well laid foundations along with others that are recipes for disaster.

Happy Walling

Foundations (cont.)



Good foundation: maximum stone into wall, tight joints and level upper surface



Level upper surface gives a sound base from which to continue the building process



A foundation where everything is wrong. Stones laid straight on to grass; tracing; excessive angling of topside of stone leaving it prone to 'orange pipping'



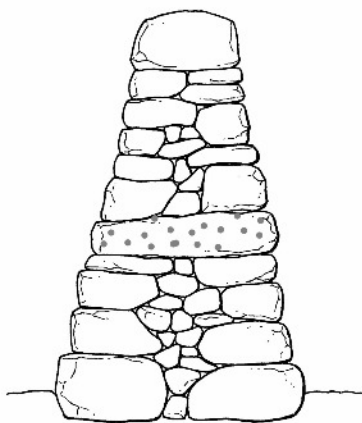
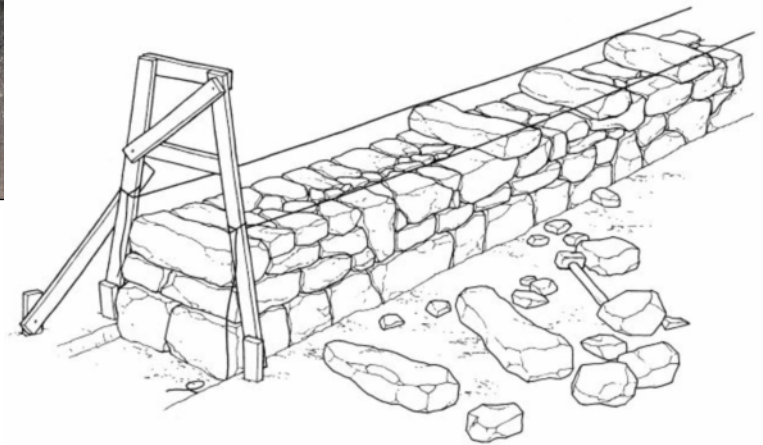
A foundation with stones laid like dinner plates up on their sides; a bad short-cut bound to fail

Throughstones – Sean Adcock



Sean Adcock is a waller from North Wales, a DSWA(UK) certified Master Craftsman, winner of

over 30 walling competitions (twice a runner up in the UK's Supreme Championship). He edits *Stonechat* and is author of numerous other publications including *Stonework – How not to Build a Dry Stone Wall* (essential reading for all amateur wallers and probably a few pros) and *The Conservation Volunteers Dry Stone Walling* - often referred to as the walling bible. Sean kindly granted permission for this article, edited for Australian conditions, one of several technical pieces downloadable from his [website](#).



Sketches: Dry Stone Walls—Basics, Construction, Significance

A *throughstone* is, as its name suggests, a stone which completely traverses the width of a wall. Its function being to tie the two faces of the wall together and to distribute the weight of the wall above them more evenly to the wall below. In North Wales they are set flush with face of the wall. In other parts of the country they protrude through the face of the wall (usually from both faces, but occasionally from just one). Explanations for these differences are legion. For example it is argued that set flush they prevent sheep from using them to gain purchase when trying to get over the wall; if cattle are present they will rub on protruding *throughs* potentially destabilising the wall; protruding they will still function as *throughs* if the wall settles and widens.

Throughs (cont.)



Protruding throughs—Yorkshire

On some contract specifications they protrude so that they can be seen to be present, however just because a stone protrudes doesn't necessarily mean that it runs all the way across a wall. It is not completely unknown to find shorter stones protruded in order to maintain a regular pattern in areas where protruding *throughs* are the norm.

Spacing also varies. Ideally they should be equally spaced at about 1m intervals along the length of a wall. However this will of course vary according to availability; if you are repairing 10m of wall and only have five, then they should be at 2m centres; and stone type—with slates and many shales you usually have a plentiful supply and will often reduce centres to around 60-75cm to help compensate for all the "tracing" (long axis of stone along the line rather than into the centre of the wall). Closer spacing can make building between them awkward, unless you set them in a complete layer.



Complete layer of throughs (coverband under copes)

This is an interesting practice found across much of the Yorkshire Dales. This method provides some food for thought. In terms of weight distribution it should work very well; in addition it should provide a solid uniform base for the top of the wall reducing potential settlement (similar to building a dry wall on a concrete footing). There can theoretically be problems associated with such an approach. If there is any settlement below the *throughs* they will form more of a uniform slope than if they were spaced, increasing the possibility of the wall above them effectively sliding off. Other potential problems relate more to the use of slabs as *throughs* in general. Whilst they act very well in weight distribution where they cross more than one joint in the face of the wall it is difficult to get them to sit on every stone. Hence some stones below them might be loose, and similarly as the wall settles it will not necessarily settle evenly below the *through* again leading to loose stones.

This occurrence is not that unusual in areas using complete bands of slabs. In such instances the *throughs* are actually preventing the whole of the wall settling as a single unit, and the face can peel away when the stones become loose. This is more of a problem where the building stone is rounded compared to where the stone is flatter and hence effectively more stable per se.

On balance complete bands of *throughs* are probably a good idea however the problems associated with slab *throughs* should be born in mind whenever they are used and special care taken with their setting. Where there is a plentiful supply, or for taller walls (normally over 1.4m high) you will often find more than one band. The spacing between individual stones in any one band is the same as for a single band, but the bands themselves are staggered.

Single rows are normally set around half way up the wall (including coping), but this can vary depending on the actual length of available stone, local tradition and presumably whim. Similarly double rows would normally be set around 1/3 and 2/3 way up. It should be born in mind that stones near the top of the wall have little weight of stone above them and so have a limited role to play in terms of preventing bulges by tying faces, or weight distribution.

If *throughs* are set flush with the two faces of the wall this can have implications for where they are set in terms of height. If the *through* is of a type of stone that will not dress to length easily (big knobbly granite for example); or is likely to disintegrate/crack if you do try (such as weather worn, thin, shales) then they are set at whatever height is most suitable for their length. They might actually project slightly, but I do mean slightly: much more

Throughs (*cont.*)

than a couple of centimetres would be pushing it. As far as their distribution is concerned it is important that they are still evenly placed along the length of the wall. I have dismantled several walls where the only gap in a length is immediately alongside a nice piece of wall with literally 4 or 5 *throughs* in the first metre or so. As a result the piece without *throughs* has not moved or settled anywhere near as much as the piece next to it causing a fault line between the two and no doubt contributing to the catastrophic failure of the gap. As to their actual spacing along a length I would ignore counting any in the bottom or top $\frac{1}{4}$ of the wall, then space as normal (i.e. length divided by number available).

Where the walls are built of small stone and are effectively two independent skins separated by a core of hearting (as are many limestone walls), the lack of *throughs* can be a serious weakness. However in some cases the walls can be built with a lot of stone which stretches half way *through* the wall effectively knitting the two faces together, in a way not dissimilar to using $\frac{3}{4}$ *throughs* as described below. Whilst generally these walls would be stronger with *throughs*, their absence is not necessarily a serious weakness.

At last we get to setting the stones.

Ideally the wall should be built so that the two faces are level. Think ahead and try to work out where you want to place the *through* so that you can try and avoid the creation of a joint on one side or the other. As with normal stones a *through* should cross the joint of the two stones it sits on; achieving this on both sides can be problematic. Moving the stone slightly to one side or the other doesn't affect the spacing enough to matter and is better than creating a joint. Two stone joints are not disastrous as long as you do cross them before they become running joints. Bear in mind the example above, a joint immediately alongside a *through* is probably technically a greater fault than a simple running joint (subject to confirmation by a mechanical engineer).

It is not advisable to cross joints through the expedient of setting the *through* diagonally across the wall. Whilst it will still distribute load it is not as effective against bulging. Technically it will not be binding the two faces as efficiently as it could if perpendicular to both. As the wall settles the diagonal *through* could effectively pivot on a vertical axis, and not function properly as a *through* until it is perpendicular with the wall. By definition the wall will then be bulging, its thickness now defined by the length of the realigned *through*.

Levelling both sides of the wall also ensures that the *through* itself is set level across the wall. Sloping throughs

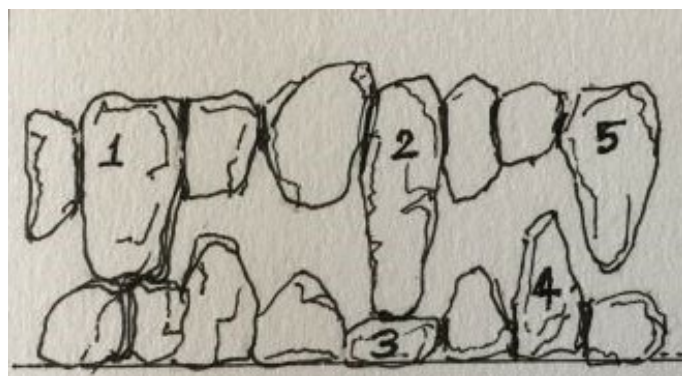
effectively try to shed the stones sitting on them. They tend to be more effective at doing this than a single sloped face stone as the stone at the top end of the slope can effectively end up giving the stone at the bottom end of the slope a bit of a push.

Generally it is thought important to make sure that you do not leave any voids under the *through*. A well packed *through* will distribute weight better and with some stone types will help reduce the chance of the *through* being snapped or cracked by the weight of stone on top of it.

With some of the more irregular stone I do not always aim to build the wall level on both sides, rather leaving one side 10cm or so low. I then set the *through* on the high side and somehow prop it up level on the other. It is then possible to see exactly what size and shape of stone(s) is required to get it to fit properly on the low side. The *through* is then removed, or set just to one side, whilst the level is built up with the selected stones and the *through* then reset in place. This is not as easy as it sounds and generally for beginners it is far preferable to level the wall and set the *through* even with a joint.

What happens if you don't have a *through(s)*? If we strip out a 10m gap and only have two *throughs* setting them around 2-3m from either side of the gap isn't really going to do much for the strength of the wall. It will be better than nothing but only just.

This is where $\frac{3}{4}$ *throughs* come in. The first thing that should be understood, is that $\frac{3}{4}$ *throughs* come in pairs. The second is that $\frac{3}{4}$ means just that, no more no less (well maybe just a little, but millimetres rather than centimetres).



Plan view:

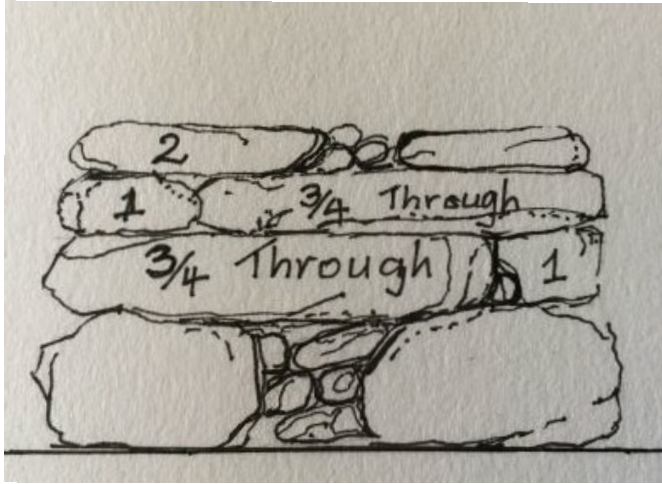
1 good $\frac{3}{4}$ through

2 too long

3 excessively traced

4 & 5 too short—good building stones

Throughs (cont.)



The pair of *throughs* should be set as shown left. The top stone should sit firmly on the lower stone in order that friction between the two is maximised. This increases the ability of the pair of stones to act as one, thus binding both faces. Subsequent to the setting of the $\frac{3}{4}$ *throughs* care needs also to be taken to ensure that the stone(s) between the face of the wall and the $\frac{3}{4}$ *throughs* are a good fit (1 left), with little if any gap between them and the end of the $\frac{3}{4}$ *through*. In addition the stone between the face of the wall and the top stone should be tied in securely. Good length building stones should be set on top of them to hold them securely (2), so that they are not merely compromising much of the good work done by placing the *through*

Dealing with these points in reverse order. Each of the pair of stones when placed on one side of the wall (projecting or otherwise) stretches three quarters of the way into the wall, no more no less. If it is much less than $\frac{3}{4}$ it is just a good building stone; if it is much more, then stone placed between its end and the second face of the wall will necessarily be either very small or excessively traced (long axis along wall) negating much of the good the *through* should be doing

You cannot have a single $\frac{3}{4}$ *through*, all by itself it is just a long building stone. It might be a good stone which has some binding function and some weight distribution function, but it obviously falls short (metaphorically and physically) of being a *through*.

I used to prefer a method where the two stones are set alongside each other, ensuring good contact along their length. It's difficult to evaluate exactly how this method works vis a vis the first method with regard to weight distribution, however it is unlikely to bind the two faces much more than good building stones. The friction between the two stones is not likely to be anywhere near as good as in the former method, hence the two stones will not act as one. Consequently it is far better to sit one on top of other.

Just a couple more thoughts. If combining *full throughs* with $\frac{3}{4}$ *throughs*, mix them up, don't set a couple of *full throughs*, and then a couple of pairs of $\frac{3}{4}$ s – alternate them. If you have a stone which has to be traced wherever possible do so below a *through* so that theoretically it will be held in place more effectively.



Two of Sean Adcock's projects

Left: Two metre garden wall

Below: restoring part of Gualala Stone Zone, New York State



Womens International Stone Alliance

Emma Knowles (DSWAA member)



There are and have been some amazing women working in traditional stone trades, yet like many similar trades the numbers are low, and women are not very visible. Women rarely have the opportunity to work with other women and those keen to have a go sometimes need additional support and encouragement to enter a male dominated trade.

Women's International Stone Alliance has been established to create a strong presence and future for the traditional stone trades through actively encouraging and supporting women's participation. We work with women, with professional traditional stone trades organisations, and with men keen to assist more women into these trades.

Established in early 2020, WISA spent much of the year connecting online with women in stone trades from across the globe. The input we've had from almost 150 women in 12 countries will help guide our plans for the year ahead.

The initial response to the establishment of WISA has been extremely positive, with women, men and stone organisations recognising the need for such a forum. The support of men in trades, helping to educate their peers about the need for an organisation like WISA has been particularly encouraging.

WISA (cont.)

WISA's goals are strongly supported by women with over 96% agreeing with the initial aims, to:

- Raise the profile of women
- Encourage and inspire
- Advocate across relevant industries
- Run conferences and events
- Build community
- Become unnecessary

Feedback from our recent survey indicated that the top priorities for women are promoting women and encouraging others, mentoring opportunities and networking opportunities (online). One of the positive aspects to come out of COVID19 has been the recognition of the ease of working collaboratively online.

Once we're able to hold events and travel again, WISA will be facilitating a broad range of women-led opportunities, including the construction of unique edifices in different locations around the world designed by master craftsman David Griffiths. David has been working with our team to produce a series of edifice designs which aim to celebrate the strengths and capabilities of women in a culturally specific way. The collection is named in honour of Mary Wollstonecraft, and we hope one of the first to be built will be in Alice Springs, Australia.

We are looking forward to celebrating and encouraging women's involvement in the stone trades in new and creative ways. To connect with us or find out more, visit our [website](#).

Emma Knowles and Louise Price, co-convenors.

DSWAA member Chris Payne came across the following article in an old copy of the English Country Life



**BUILDING A DRYSTONE WALL, NEAR CHIPPING CAMPDEN
IN GLOUCESTERSHIRE**

COUNTRY LIFE—SEPTEMBER 1, 1977

CORRESPONDENCE

JIGSAW STONEWORK

SIR,—Building a Cotswold drystone wall is a skilled job requiring plenty of patience, but the two women shown in my photograph can compete with the majority of men who normally do this kind of work.

It is essential to choose stone of the right size and shape. At a height of about 18 inches "through" stones, protruding from each side of the wall, are built in to give the wall strength and also to provide footholds. The top is finished with "combers", which form a pleasing serrated edging.

The two women thoroughly enjoy their work and describe it as like doing a jigsaw puzzle.—EPNA KENT, 36 Ravenswood Avenue, West Wickham, Kent.

The Flagstone profiled several women wallers, including Emma Knowles, in Issue 44 (January 2019). We also featured Lydia Noble, another talented young waller from Yorkshire., who commented: "I [recently] ran a women's walling workshop last April that might interest your readers. There we're 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."

Dry stone walling workshops for beginners in South Australia are now attracting almost fifty-percent women.

Festival of stones—virtual



The Féile na gCloch (Festival of Stones) is an annual celebration of stone held annually on Inis Oírr, a rock strewn island of the Aran group in Galway Bay (TFS #27, Feb 2013).

Last year, as the world cancelled all its events and social gatherings, The Féile na gCloch festival broke new ground and took the festival online. Organised by Galway County Council and the Inis Oírr Corporative, this online festival was a celebration of all aspects of stone craft from stone wall building to lettering and carving; paving, using hot limes and sketching and more. Great films and videos were created for the event and now remain a great archive of stone heritage. The [website](https://www.dswai.ie/manature-walling-festival) allows you to immerse yourself in all aspects of the festival.

The Dry Stone Wall Association of Ireland supported the festival by running a miniature dry stone wall building event and, following the great success of their 'Draw Stone Walls' sketching event back in May, decided to run something similar alongside the miniature walling.

To encourage participation they ran these as competitions with some great prizes. Both were open to all ages, wherever they were in the world. To have their art or craft included in the campaign and be in with a chance of winning, participants posted their photos or videos online. Response from the public was terrific, with contributions from: Ireland, Italy, Germany, Austria, UK, Canada, America, Luxembourg and Kevin Hart from Tasmania. All up there were 68 sketches from approximately 50 artists and 26 miniature walls. Many who participated told how wall building and sketching from home really made them feel like they were part of the event, giving them that great sense of camaraderie that comes with attending stone festivals.

You can see all the miniature wall and sketching entries [here](#) and [here](#) along with a nice [youtube clip](#)..

Kevin Hart grew up in Aberdeenshire and started walling with his grandfather repairing dry stone dykes on the farm. He has been walling in Southern Tas since 2017.

I moved to Tasmania in 2012, working as a trail builder on Mt Wellington/Kunanyi restoring paths, steps, features and retaining walls, all dry stone work. This reignited a passion



for dry stone walling. In 2018 I returned to Scotland for 6 months with my young children and Australian partner. There I worked with legendary path builder Matt McConway and walled with two of Scotland's top wallers, Callum Gray and Euan Thompson. I then gained my Level 1 certificate at the DSWA(UK) centre in Cumbria, meeting fellow Australians Emma Knowles and James Duggan who were also testing that week.

Returning to Tasmania I am pushing hard to wall full-time, currently working with Florian Kessler with encouragement from Geoff Duggan. I do have to fall back on path work now and again but interest is growing and I'm confident building new walls and restoring historical walls and features can be a full-time occupation.

My father who hails from Donegal told me about the online competition. Having spent lots of time in the bush I'd always admired the cube form of wombat poo and its 'walling potential' and it seemed to fit one category nicely: 'stone wall without stone'. Kids and I quickly gathered the material along with a couple of quoll throughs and possum copes and set to building the wall (*below*). It was a bit surreal to see my name alongside the likes of John Shaw Rimmington and Sunny Wieler. The event was a great way to connect with the incredible community of dry stone wallers around the world during a tough time and I look forward to one day attending the festival and good craic over a wall.



Book preview – Nick Aitken

Nick Aitken is a certified Master Craftsman, examiner and instructor through the DSWA(UK). He has worked all over the Scottish Highlands and Islands building and maintaining stonework in a wide variety of stone types and structures from Brochs and Blackhouses to burial ground walls.

Nick's new book **DRYSTONE – a gathering of terminology and techniques** will be published in May this year and promises to be something of an encyclopaedia for anyone seriously interested in walling. Readers of *The Flag Stone* had an introduction to some of Nick's research in Issue 45 (May 2019).

'The original intent of this research was to bring together English language words and phrases associated with drystone walling in the British Isles', says Nick.

'This inevitably expanded to include drystone construction and principles applicable to any stone structure. Stone trades overlap and interlink. Masonry terms, applying to cut and mortared stone, were included where relevant or where they add interest to the text.'

'Most modern wallers have learned their trade from national organisations, or from literature intended for international audiences but drawn from old sources specific to one area. The preservation and promotion of these craft skills is admirable but appropriation of local terms for national or international use often results in Scottish dykers using words from Yorkshire, or wallers in the south of England using phrases never spoken by their grandfathers.

'Arguably this loss of language does not matter if the practical skills are preserved, but a record of dry stone terminology is essential. These words and phrases are an important part of cultural history and crucial for a full understanding of the building processes and the builders.'

The table of contents headings gives an indication of the scope of this book:

Introduction	9
1. Material	12
2. Dyking techniques	60
3. The structure of a drystone wall	109
4. Drystone structures	73
5. Wallers and dykers, output and income	283
6. Weights and measures	305
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The book will be published in Scotland. DSWAA could possibly facilitate a bulk purchase and have the book available here, so contact [Bruce Munday](#) if you are keen to be kept informed.

Curiosity corner

– Richard Tufnell

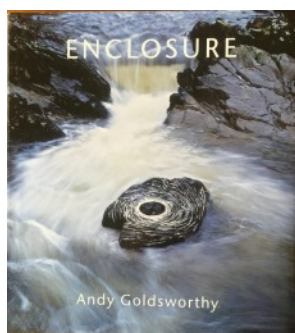
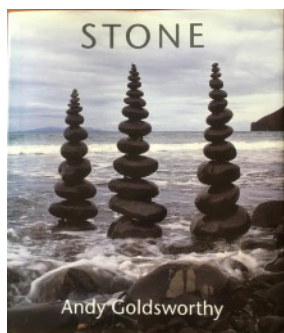
Richard Tufnell is another British Master Craftsman who has contributed to several editions of *The Flag Stone*. As a bonus he has offered a catalogue of short pieces that he files under Curiosity Corner. This one is indeed curious, particularly in light of Geoff Duggan's article on foundations.



Some types of wall are hard to thoroughly understand when their form of construction is no longer practised. Edge fences can be so described, found in the mid-western states of the US and in parts of the South West UK. We can deduce from experiment that they are relatively simple to build for those with limited skills, and their locations on slopes means they are strongly compressed and hence stable. Further, they can be built with the large slabs of limestone prised from surface beds with little need for little further working. But why are they built adjacent to rivers? The assumption – for that was all it was – seemed to indicate drainage after flooding played a part.

So it was with considerable interest that we stumbled upon this wall deep in rural southern France. Our knowledgeable companion said that a number of the local walls had been built with a diagonally laid bottom course to aid drainage in retaining walls, particularly where the slopes produced springs. This appears to have filled one gap in our knowledge.

Book review – Bruce Munday



A friend recently loaned me Andy Goldsworthy's coffee-table books: *Stone* and *Enclosure*, 'finds' from a recent visit to a bookshop in Port Fairy. The former was published a quarter century ago in 1994 and the latter in 2007. So why review them in 2021?

Well, could one ever tire of Goldsworthy's creations, particularly when they are so well captured in photographs by him and his collaborators.



Stone is a portfolio (including Aust) of some of his creative explorations with found rocks decorated with sticks, bones, leaves, ice and snow. For the waller there are stone elaborations such as cairns, arches and of course walls, with early examples of his sheepfold project—built with Joe Smith and the focus of his other book.

There is no escaping the dynamism of Goldsworthy's work either before or behind the camera. This is perhaps captured as he describes his approach to cairns: 'Each time I try to achieve a perfect cone but somehow lose control in the making. Cones dictate their own shape and I resist making 'corrections' which might interrupt the flow of form. I must think beyond the detail of individual

stones to an overall idea of the form. The day I make a perfect cone will possibly be the last time I make one.'

Goldsworthy of course embraces the ephemeral but I get quite anxious when I see pictures of his wonderful work just blown or washed away or simply tumbled down. When once I built some minor stone works near a car park Kristin admonished me: "You know someone will drive into them and you'll get angry". Goldsworthy took transitory to a new level with a proposal (unrealised) to build a dry stone cliff top enclosure to collapse a little each year as the cliff eroded!

Enclosures features mainly the *Sheepfolds* project, taking in some 45 dry stone sheepfolds in Cumbria and amply described by [Raelene Marshall in Issues 41 & 48 \(Jan 2018 & May 2020\) of The Flag Stone](#).

This was an immense project involving a team of wallers (led by Steve Allen) and some big machinery. There are sheepfolds enclosing huge boulders and cairns, others with sculptures and even arches. Some of the folds are lovingly restored and others he has pushed what he can do with the structures incorporating elements in the walls that surprise and delight. The project also involved challenges from Cumbrian weather, foot and mouth disease, and traditional farmer scepticism around practical infrastructure becoming art.

The text revolves around fold-by-fold descriptions as the project proceeded over a decade. The early work is described in daily journal entries, the later work more in the form of executive summaries. I found the variation in style somewhat annoying, but the insight into Goldsworthy's thinking about each project is absolutely fascinating – in fact quite a privilege.

Believe it or not both books appear available in most state libraries and you never know one might turn up in a second-hand bookshop perhaps a waiting room.



Editor's page

SA Field trip

Planning is underway for a DSWAA field trip weekend in SA, essentially picking up where we left off in 2020 when everything went pear-shaped. Even now it is impossible to plan with any certainty, particularly for interstaters.

As before the focus will be on the towns of Willunga and Strathalbyn and their surrounds. There will be a mixture of historic rural dry stone walls and contemporary features, some of which have received a bit of profile in recent editions of *The Flag Stone*.

At this stage I am trying to settle on a date that works for the multitude of people who will be involved at the delivery end as well as what is most likely to work for visitors.

The most important thing at the moment is to watch your in-box for DSWAA eNews as that will be how we announce the dates and arrangements.



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

Our goals are:

- *To inform and educate the nation about the cultural significance of dsw&dss in Australia and their associations and meanings for past, present and future generations.*
- *To document dsw&dss and draw on historical records in order to encourage appreciation, conservation, maintenance, repair and interpretation of those of cultural significance.*
- *To establish disciplines and accreditation systems that can contribute to the care and construction of dsw&dss.*
- *To assist in ensuring that new construction, demolition, intrusions and other changes do not adversely affect the cultural significance of dsw&dss and that modern uses of them are compatible.*
- *To respect Indigenous heritage places and cultural values, and, in particular, to assist in the conservation of those associated with dsw&dss.*

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Membership

Annual membership fee

Corporate \$80; Professional \$50

Single \$30 (\$80 for 3 years)

Couple \$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 Atkins
P 3-7	A & J Veale
P 8-10	L Atkins
P 9-12	B&K Munday
P 13-15	G Duggan
P 15	top right B Munday
P 16-17	B Munday
P 19	S Adcock
P 20	E Knowles
P 21	provided by C Payne
P 22	K Hart
P 23	R Tufnell