

HANDY HUMAN MEASUREMENTS

Grower TIM DEANE finds the old rules work better than rulers.

There was a time when the human body provided all the linear measurements necessary to life. Maybe in a few places it continues to do so, and growers still make use of some of these human-scale measurements just in the natural way of things – as in pacing out a row or gauging the spaces between plants.

Other than the stride for reckoning a distance, probably the most used is the six inches to be got from the tip of your outstretched thumb to the far edge of the palm. This is a tool, I can't forbear from saying a handy tool, that no grower is without. Of course no abled person is without it, but growers have more need than most to be getting that sort of spacing near enough right. Gardeners too I find – it's just the thing

when selecting three nicely matched courgettes, each no more than 6" long, for the annual Christow Show in August. It's scope can be extended by placing both hands down together with thumbs touching. That's a foot, and an easier one to use than putting toe to heel. If you move the first hand over the second, placing it so the little fingers are touching, there's eighteen inches from where you started. Keep going hand over hand and you'll soon know if that bit of wood you're eyeing up for a job is long enough or not. You might want a steel rule for the job itself, or, if it's just a matter of bashing something up, you might not. It's a good way of knowing the length of a gate, which you can't always be certain of just by looking. In fact it's an act especially suited to getting the measure of a gate, a gate's top rail being just the right height that you can run your hands over it in comfort.

I've been making use of it all my farming life but it's only just recently that I discovered this six inches to have a specific name. I came across it in the old Scots ballad of "The Wee Wee Man" whose legs "were scarce a shathmont's length". A helpful footnote explained that this distance was from the extended thumb to the extremity of the palm. In English the word is 'shaftment', and other north European languages have similar terms, all deriving (it seems) from the length of that part of an arrow shaft comprising notch and flights.

The hand provides several other measurements of varying usefulness. Among these the eponymous four inches – across the widest part of the hand – is still given constant lip service in telling the height of a horse. The span though – from the tips of outstretched little finger to the thumb – has less currency. It's reckoned to be nine inches, but I find with age and worn-out joints that I can now only get eight inches out of mine.

Using the forearm gives you the distance from elbow to tip of middle finger which is a cubit, or eighteen inches. Noah used this when building his ark – *Genesis 6.15*. These three have in succession values of $\frac{2}{3}$, $1\frac{1}{2}$ and 3 shaftments. There's

the ell too, which seems to have started out as synonymous with the cubit but somehow ended up being twice as long. In somewhat different values according to locality and the material being measured it was the essential unit of the cloth trade, but for most of us is now commemorated only by our elbows.



The longest unit of measurement provided by the human body is the fathom, this being the six feet across the chest from finger-tip to finger-tip. When you coil a rope it's plain to see why this became the measure of depth. Holding the coil in one hand you move the other hand along the rope to its fullest extent before gathering in the next length. With the aid perhaps of a bit of a backward stretch of the

arms each circle of the coil will be close enough six feet – so gauging the depth of water (and mine shafts) was naturally done in multipliers of that length. Growers are unlikely to gather up their hose-pipes in fathoms exactly, the material being too heavy and awkward (especially on a cold day), but the same principle applies. If you can keep the coils fairly even then counting them gives a good idea of the overall length when looking for the right hose for the job.

By modern standards these measurements are hopelessly inaccurate – we're not talking millimetres, never mind nanometres. Then again they depend on the body of the person doing the measuring so a bit of leeway has to be allowed for. But adjustments can be made. If you're measuring in shaftments and yours are on the short side you can leave a gap between the thumbs to compensate. If you want your pace to be an actual yard you can soon work out what degree of adjustment is needed to make it so – for comparison three bays of a modern shed will generally give you fifteen yards. But for most horticultural purposes extreme accuracy is not needed and a pace or a hand is quite good enough, and is always with you when a steel rule or notched stick may not be.

None of these human measurements have straightforward metric equivalents and so could be considered redundant. But a digit was a finger long before these digital days, and the metric system was imposed on a conquered Europe by the armies of Napoleon. The metre that is its foundation was derived from a miscalculation of the length of Earth's meridian, so it can't be said to be grounded in any obvious reality. It's a great system for machines, but it lacks the human scale and intuitive element of the traditional measurements. The numbers involved are too exaggerated to be easily visualised – you can't halve and quarter in the mind's eye as was natural to the old imperial system. That's why an 8 by 4 sheet of ply or plasterboard is still 8 by 4 rather than 2440 by 1220. And you'd probably need to be a basketball player to have a pace that equals a metre.

J. Seeley — A Handspan Apart