

PAUL HERVEY-BROOKES is an awardwinning landscape designer based in the Cotswolds

# Natural swimming pools

A thriving habitat for wildlife, a haven for natural planting, and chemical-free swimming — here's what to know about going au naturel

sk people for a list of things they'd love in their garden and a swimming pool is always on there. A relaxing dip in your own pool, in your own garden is an idea that appeals to many. One concept that is becoming more popular in the UK, following on from long-standing trends in mainland Europe, is the idea of a natural swimming pool. Chemicals are not used to clean the water; instead natural swimming pools are filtered using aquatic plants, which clean the water naturally.

## What are the options?

Natural swimming pools – which can be as small as  $15m^2$  – come in two main forms: the traditional natural pool (or pond), and the living pool, which visually looks more like a traditional filtered pool.

## THE NATURAL POOL

With a natural pool, the idea is that a large, deep pool – the swimming area – is surrounded by marginal planting that filters and purifies the water naturally. In essence, this type of pool has the look and feel of a large pond.

Construction involves creating a reinforced, lined swimming pool area, alongside a series of filtration beds made again with a liner and a series of planted shingle pools, which help to remove debris. Unlike a traditional pool, a natural pool's feel is best maintained by dark green liners. As its filtration system relies entirely on plants, there's no option to artificially heat the water, and using a darker liner will give some secondary warming that the light blue or aqua liners of a traditional pool don't. You can also install lighting both in the main swimming area and through the marginal filtration beds.

**THE SHAPE** The swimming area of the natural pool can be informal in shape or more rectangular. A natural pool can take up quite a bit of space and like any pool, needs to be constructed on a level or levelled site. For a pool with a swimmable area of 20m<sup>2</sup> the entire pool would need to be 40m<sup>2</sup>. This kind of size suits rural locations and those with larger gardens because alongside the pool you will need shallow space for a deck, terrace or jetty access point. The pool area will also need to be planted to merge with the herbaceous and shrub planting that outline the margins of the pool.

**THE MARGINS** Often the two zones, the swimming pool and

the filter beds, are separated by a shallow band of stone. This separation can be given a natural feel, or a more contemporary one (using a band of cut stone, for example). Either way, this band stops the soil of the planted filtration beds moving into the main body of the pool. It is usually positioned roughly 50mm below the surface and should be 100mm to 200mm in width.

One of the advantages of a natural pool is the shallow planted margins that form its natural filters. Rather than the traditional drop into water, the margins on natural swimming pools are sloped. A 20m<sup>2</sup> pool, for example, will slope downwards about a metre from the edge to roughly 400mm below ground level (or your set 0 point if you're building on a slope and are creating an artificial level). The depth of the swimming area will be around 1.5m. So for a 40m<sup>2</sup> pool the shallow graded margins need to be  $20m^2$  — this will include 7m<sup>2</sup> of bio (plant based) filtration and 13m2 of marginally planted space that will allow the water to purify. The swimming area will be 20m2 with a depth of at least 1.5m to allow good swimming and stop plants creeping away from the ledges to the swimming area.

THE PLANTING Planting for a natural pool is key. Of course, like any part of the garden, it will require maintenance — herbaceous aquatic plants will need to be recut back in the late autumn. It's also worth remembering that the term 'filtration plants' can be a misleading one as the plants do not remove particulate matter from the water. What they actually do is absorb and capture nutrients from the water — in turn







# **5 REASONS TO PICK A NATURAL POOL**

**1** NO CHEMICALS — A fresh water pool with no chemical disinfectants is good for swimmers' skin and the environment.

 $2^{\text{A POND AND POOL}}$  — A natural swimming pool looks just like a pond and is as natural as they come.

3 NO ONE-SIZE-FITS-ALL — A living pool is a great alternative if space is limited or if you'd prefer a more traditional-looking pool.

4 LOW MAINTENANCE — With only a little pruning needed, the plants keep a natural pool clean and the filter systems in a living pool keep it debris and algae-free.

**5** A HAVEN FOR WILDLIFE — a natural pool will of course invite a whole host of wildlife into your garden.

**CRYSTAL CLEAR** WATER (ABOVE AND ON PAGE 93) This wonderful **Biotop Natural Pool** in South Yorkshire has a swimming area of 140m<sup>2</sup>. "The clarity of our pool is like looking into a giant aquarium. The jetty, stepping stones and 'floating' penny deck allow you to wander right out in to the water," enthuses pool owner Sarah Murch.

meaning algae (which thrive on these nutrients) will not grow and bloom in the water. The amount of nutrients that a plant absorbs is more or less proportional to the amount of plant growth. So, plants that grow 'greener' are removing more nutrients, but this can also mean that they grow more aggressively.

Common species used to filter include marsh marigold, flag iris, loosestrife, hop sedge, water mint and water lilies.

Fresh water attracts a host of acrobatic insects. Old-world creatures such as damselfly feed on mosquito larvae, using leggy stems of flag iris to emerge from the water for their flirtatious flights. Pond skaters, water boatmen and iridescent dragonfly are common. Surprisingly for their size, many aquatic species depend on freshwater ponds for refuge, including more than 100 UK Biodiversity Action Plan priority species.

COSTS A natural swimming pool costs from £300 to £600 per m², with the price per m² decreasing as the overall area increases. This may sound odd, but as the pool gets bigger many of the expensive items it requires – machinery hire, waste disposal,



THE LIVING POOL
The example
living pools (left
and below) look
like traditional
swimming pools but
natural planting and
filtration systems
mean they are
chemical-free.

THE POND POOL
The irregularly
shaped natural pool
by Water Artisans
(bottom) mimics
a pond and has a  $45m^2$  swimming
area and a planted/
regeneration area
of  $40m^2$ .



and some materials - remain the same in terms of up front cost. These items are then used over a larger volume of space, with the result that it effectively costs less. Added to this, smaller pools are often located in more restrictive spaces, which has an impact on costs and labour. Designs are landscaped to sites and individual requirements, so construction costs may be high compared with traditional pools. Over time, however, natural pond owners save on the cost of chemicals and expensive filtration equipment.

### THE LIVING POOL

Alongside the natural pool and its marginal planting, Biotop - a specialist company that has been making natural pools for over 30 years – has introduced a natural filtering system that works to create a more traditional-looking swimming pool. For homes where space is limited or perhaps where a more contemporary look is desired, the natural living pool has a filter system that scoops the water away through a curved filter to remove debris. It also includes a series of hidden underground sand filters for

cleaning before pumping the water back into the pool. This removes the phosphorus that is the main cause of algae blooms. Lighting can be added into the main body of the pool. However, this system is expensive and really has to be installed by a qualified specialist. Expect an average-sized  $20\text{m}^2$  pool to cost in the region of £60,000.

A natural living pool can't be artificially heated. The addition of pumps for swimming would be disruptive, however static swim bands (that can be harnessed to the side of the pool) allow you to swim without moving and are effective in pools as small as  $16\text{m}^2$ , so this is easily overcome.

# Talk to the specialists

There a number of specialist companies in the UK. Choose one that is highly recommended, such as Big Fish Landscapes or Water Artisans, both of which have the accolades of RHS Chelsea Gold Medals and international associations with natural pool technicians. Ask to have a consultation about your site, and to talk through what natural pool you would like.



# **USEFUL CONTACTS**

BIOTOP POOLS www.gb.bio.top BIG FISH LANDSCAPES www.bigfishlandscapes.co.uk WATER ARTISANS www.waterartisans.com