

And so to sleep...

With its feathery leaves and parasols of tiny white petals, hemlock makes a pretty addition to British riverbanks and ditches—but its charm ends there, says Deborah Nicholls-Lee

HIDING, as Keats wrote in *Endymion*, 'in desolate places, where dank moisture breeds', mousey-smelling hemlock contains lethal alkaloids that can cause vertigo, shivers, muscle paralysis and asphyxiation. It's a fittingly gruesome ingredient for the witches' brew in Act IV of Shakespeare's *Macbeth*:

Scale of dragon, tooth of wolf,
Witches' mummy, maw and gulf
Of the ravined salt-sea shark,
Root of hemlock digged i' the dark...

Hemlock, for which there is no known antidote, is also a symbol of suicide and despair in Wordsworth's eponymous 'ill-fated' *Ruth*, who, jilted by her betrothed, seeks solace in Nature and makes a flute of a hemlock stalk:

That oaten Pipe of hers is mute,
Or thrown away; but with a flute
Her loneliness she cheers:
This flute, made of a hemlock stalk,
At evening in his homeward walk
The Quantock Woodman hears.

Knowledge of the powerful poison that lurks in all parts of this wild umbellifer dates back to classical civilisation, explains Laurence Totelin, who has published extensively on the history of ancient pharmacology and botany and is head of Ancient History and Religion at Cardiff University. A text written by Greek philosopher Theophrastus (about 372BC–287BC), the successor to Aristotle, references a 'very effective poison which leads to a painless death', she says, and includes 'Kôneion' (hemlock) in its ingredients.

Even earlier—and better known—is the execution by poison in 399BC of fellow philosopher Socrates, whose death throes have all the hallmarks of hemlock. Plato tells us that 'Socrates' legs were getting heavy' and paralysis was setting in, says Prof Totelin: 'He can't feel anything and it's moving up... and he was getting cold and stiff'. Today, the distinctive purplish rash on hemlock's stem bears the morbid sobriquet 'Socrates' blood'. Fast forward two millennia and Keats's *Ode to A Nightingale*

(1819) has the poet, overcome by the nightingale's happy song, slipping into a similar stupor: 'My heart aches, and a drowsy numbness pains/ My sense, as though of hemlock I had drunk.'

Later, this centuries-old poison would also capture the imagination of crime writers. Agatha Christie's 1940s murder mystery *Five Little Pigs* (later adapted for theatre, radio and television) saw Poirot investigating a death by coniine, hemlock's most toxic chemical compound. The 'Midsomer Murders' series, which began in 1997 and was based on the novels of Caroline Graham, also sees off various characters with hemlock, one killer passing it off as celery to stir up a lethal soup.

Hemlock is not all bad, however. In addition to administering the death penalty with it, the Greeks and Romans found that, in microdoses, hemlock proved a useful medicine. A text in the *Hippocratic Corpus*, says Prof Totelin, references hemlock's use as an analgesic and the eminent pharmacologist Dioscorides (about AD40–90) recommends it for the treatment of skin diseases.

Hemlock was also part of a crude toolkit used in early Greek medicine for treating a number of gynaecological issues, such as a 'wandering womb' and unwanted lactation.

But it didn't stop with the Greeks. Physicians across the globe made use of hemlock until at least the 18th century, finding it a useful sedative and muscle relaxant, for example.

Nowadays, the summer-flowering hemlock plant—not to be confused with the harmless coniferous hemlock tree—is mainly seen as a nuisance. Looking dangerously like common cow parsley, which is edible top to toe, poison hemlock implants itself in an insidious fashion, beginning life as a basal rosette of leaves that can go unremarked for months, as its roots—known as 'dead man's fingers' in the even deadlier 'water dropwort' variety—get ever stronger.

As only 150mg of hemlock can be fatal to humans and livestock, it's unsurprising that →

Powerful poison: all parts of the hemlock plant (*Conium maculatum*) pose a threat







Hemlock can take hold rapidly, creating its own monoculture

weed-control companies are often called in to identify and remove it. Jon Barton, managing director of invasive-weed expert PBA Solutions, which has teams across England and Wales, says the 'tell-tale sign' of hemlock is the 'dark burgundy-purple splotches and streaks in the stem' seen on the more mature specimens, but insists 'you've really got to do your research.'

‘The best way to manage its growth is to deal with it early’

Mr Barton has seen hemlock establish itself in hedgerows, ditches, road verges, field margins and watercourses. 'Hemlock can survive in a broad range of environments,' he says. 'It thrives in damp conditions, but it will get going on drained soil as well.' The plant is tenacious, too—hemlock will take over, shade out other species



Execution by hemlock: *The Death of Socrates* depicted by Jacques-Louis David in 1787

and 'create a monoculture', he warns. It's also an expert propagator, throwing out 'hundreds, if not thousands, of seeds'.

'The best way to manage its growth is to deal with it early,' Mr Barton advises, but any action requires 'a cautious approach'. 'You don't want to get it on your skin, digest it in any way or [get it] inadvertently in a cut or in your eye.' Mowing, for example, risks bits of hemlock being 'thrown around everywhere'. Instead, Mr Barton recommends seeking expert help, donning a hazmat suit and using herbicides or 'cutting individual plants in a methodical fashion'. It can take several assaults to exhaust the seedbanks. Success is about persistence, he says.

Fortunately, fatalities are rare, even among animals. 'We think that livestock don't like hemlock and that the smell is off-putting to them,' concludes Mr Barton. 'But if a farmer bales and it gets into hay, we think that can cause problems to animals, even after the hemlock's dried out.' If only cattle would heed the advice of poet Ann Taylor (1782–1866) in *The Cow*:

Thank you, pretty cow, that made
Pleasant milk to soak my bread,
Every day and every night,
Warm, and fresh, and sweet, and white.
Do not chew the hemlock rank,
Growing on the weedy bank;
But the yellow cowslips eat;
They perhaps will make it sweet. 

Lookalikes

Sharing family ties with parsley, parsnip and fennel, wily hemlock is a *doppelgänger* for many edible plants and, unless you are an experienced forager, it's far better to look and not taste. Here are three wildflowers hemlock is great at impersonating:

Queen Anne's lace (below left)

The downy stems and caroty aroma of this herbaceous biennial help differentiate the

species from poison hemlock. Dried seedheads can be used in tea and the mild-flavoured roots can be cooked as a vegetable. 'The Queen has hairy legs' is a mantra used to avoid confusing it with its toxic twin

Sweet cicely (below middle)

Less leggy than cow parsley or hemlock and with velvet-soft leaves and stems, sweet cicely is favoured for its aniseed-scented seeds, which can be tossed into a salad, together with its young leaves.

As the leaf structure is similar to hemlock, this fragrance is the most important clue

Wild angelica (below right)

The umbrella-like heads and waxy purple stems of this plant recall its riskier relative, but its flowers are pink-tinged and the leaves are oval. Angelica's musky, faintly liquorice smell has seen the seeds and candied stalks used in puddings and cakes—especially in the sweeter garden variety. The sap can be an irritant and should be handled with care

