

SUBSIDENCE

THE SILENT SURGE



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A LONG, HOT, DRY SUMMER MEANS ONE THING TO PROPERTY INSURERS AND THEIR SUPPLIERS: SUBSIDENCE.

“Surge” is the dreaded word on their lips, and with claims already up **400%** on last year there are widespread fears that 2018 could be a very bad year for subsidence underwriters.

Everyone is dusting off their surge plans from **2003 – the last time the industry faced a major spike in subsidence claims** – though a lot has changed since then. New techniques and processes, new supplier relationships, local authority cuts to tree officers and the rise of social media are just some of the factors insurers must get to grips with – and fast.

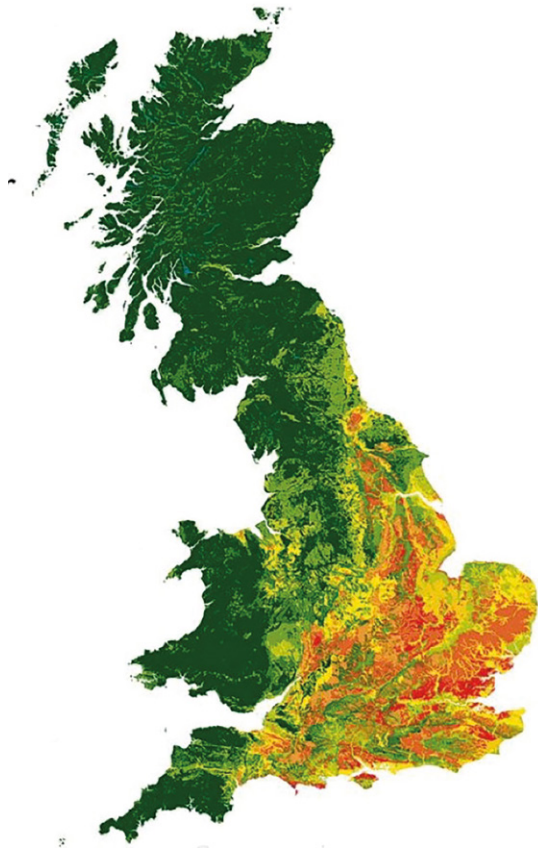
It is difficult to predict just how severe the 2018 surge will be. **Rainfall across most of the country has still not returned to normal levels** and the drier, hotter weather is forecast to continue into the autumn. The peak of the heatwave may have passed, but the conditions that lead to increases in subsidence claims have not eased.

In a surge year, the bulk of claims start coming in August to September. This year, **numbers started to rise in mid-July** and have continued in an upward trend, appearing to level off in September. Claims have also come from a much wider geographical area than usual.

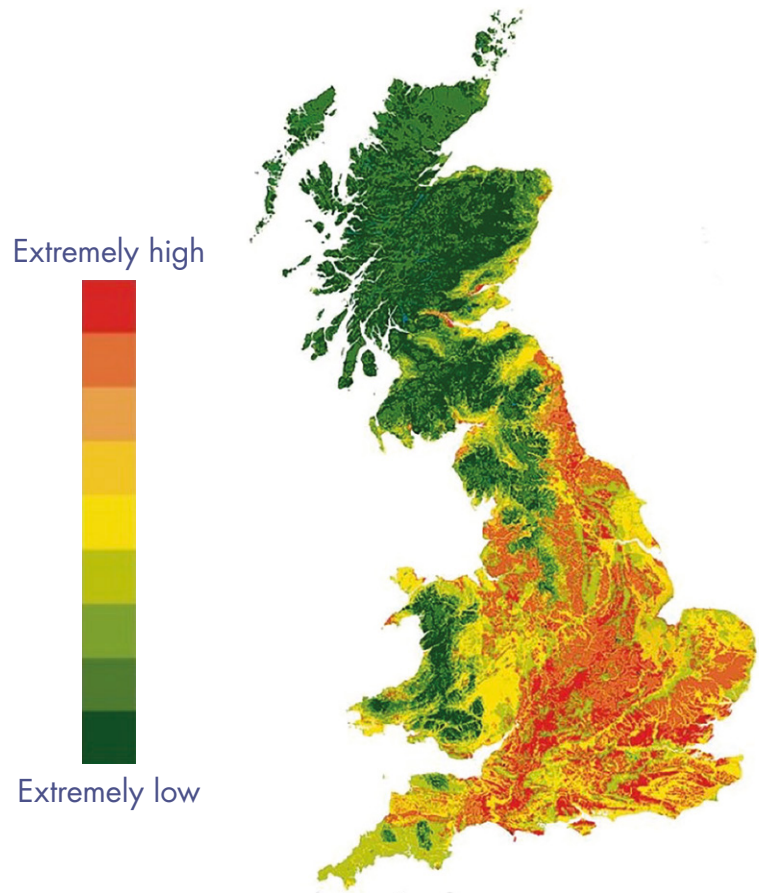


Claims already
up **400%** on
last year

Subsidence hazard in a normal summer



Subsidence hazard in an extremely hot and dry summer, such as 2018



The data relates to clay soils. Don't panic if you live in an area where the hazard is extremely high: experts would expect subsidence in only a small proportion of properties.

Source: Natural Perils Directory © Cranfield University, 2018

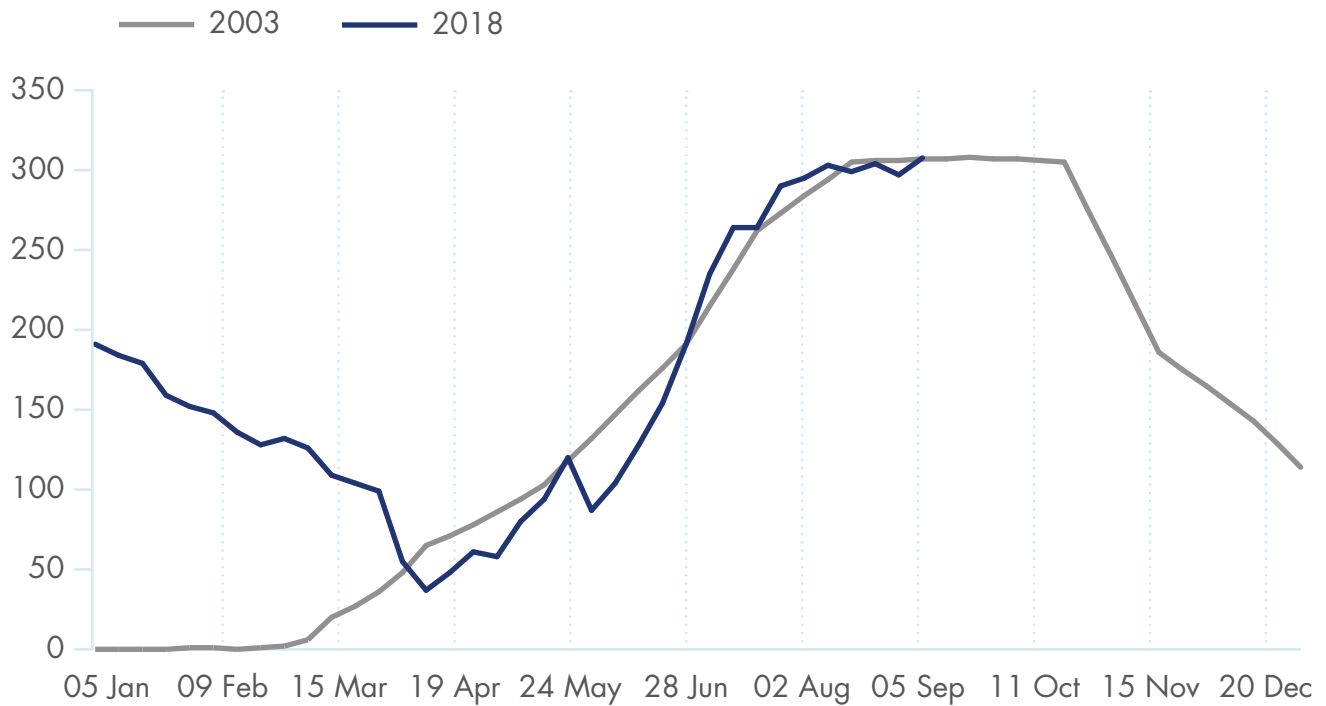
Subsidence claims are usually closely linked with the clay belt that sits across the South East of England. Clay is found elsewhere in the UK too, and this year's extended dry spell affected large areas of the South West, Midlands,

North West and North East, which are producing notable spikes in subsidence claims for the first time in a generation (see map).

This spike in new claim notifications will challenge insurers, adjusters and their supply chains, but is

not the only source of increased subsidence activity. Existing claims which were being monitored but appeared to be stable are now starting to show signs of movement. And many claims that were closed following low-level mitigation are likely to now need to be re-opened.

SMD FOR TREES – 15 AUGUST 2018



Hopes that the return of rain from mid-August onwards may arrest the surge are misplaced as readings from bore holes show that this has so far had a minimal

impact on moisture levels in the clay on which millions of homes are built. Soil moisture deficit readings in North London – which is very representative of urban

areas on the clay belt – suggest the problem is already as severe as 2003 and that the mid-August rain made a negligible impact (see SMD graph).

WHAT CAUSES SUBSIDENCE?

Clay itself is not the problem. If the clay beneath a house shrinks, the whole property might settle but it usually does so evenly across its footprint unless other factors are present. These can often include vegetation on one side or corner of a house, modern extensions built to inadequate standards or water leaking into foundations from collapsed drains – though in dry weather conditions this is less likely.

Trees are biological water pumps and their extensive roots remain the number one cause of subsidence.



Poplars, willows and oaks are among the worst culprits as they have long root structures that can stretch for over 30 meters and may soak up more than 50,000 litres out of the ground each year.

This accelerates the shrinkage of clay subsoil and, depending on their position in relation to a property, can make the rate of shrinkage uneven. This causes properties to distort in different directions, leading to gradually expanding cracks in walls.

People often look for large, easily exposed roots to determine whether a tree is causing subsistence, but it is the thin, fibrous roots at the extremes of a root system that have the biggest demand for water.

There are very good reasons to believe that the tree problem has worsened since the last major subsidence surge in 2003.



IMPACT OF FINANCIAL CRISIS AND AUSTERITY

Ten years of financial austerity has made deep cuts in local authority budgets, and the departments that deal with tree maintenance have been hit hard. Most councils have reduced their tree pruning programmes, allowing thousands of urban trees to grow far larger than is desirable, exacerbating the risk of subsidence.

The financial crisis also depressed the housing market. Fewer people have moved home, with many instead choosing to extend their current properties. The quality of these extensions – especially their

foundations – is variable. Many conservatories, for instance, have been built straight onto existing patios without any additional foundations, making them very vulnerable to subsidence.

Extensions have also moved the external walls of many properties nearer to large garden trees, and many of these types of development have not yet been exposed to a high-risk subsidence year.

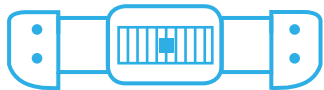
This will not only increase the number of subsidence claims landing on insurers' desks but could

also lead to protracted battles with policyholders over the adequacy of their extensions' foundations and the admissibility of claims.

The approach to invoking "defective construction" clauses to decline claims varies from insurer to insurer. Some take a hard line and decline claims even if the property has changed ownership since an extension was built. Others have a more relaxed approach based on a "test of time". Either way, such claims require a period of investigation as foundations must be exposed.

THE PACE OF CHANGE

The methods and techniques deployed in investigating, monitoring and remedying subsidence claims have changed significantly in recent years.



In the past, subsidence was monitored using physical measurement systems, such as tell tales, which allowed policyholders to see for themselves what was being recorded. Those systems have been replaced by sophisticated digital tools which generate far more data on movement and other variables. That data goes straight to engineers, adjusters and insurers who decide what and how information is shared with the policyholder and how to explain it.



Due to the explosion of social media, policyholders now have access to far more online information and advice than in previous surges – some of it helpful, some of it misleading or inaccurate. Social media allows them to find out how other claims are being handled, air concerns about their claim and criticise insurers, adjusters and engineers.



Setting and managing policyholder expectations and planning and maintaining effective communication programmes to ensure they do not hit social media networks with angry complaints is an integral part of the claims process in 2018.



TREATING EVERY CLAIM ON ITS MERITS

Not all claims are the same. Some may have the potential to be resolved quickly and a triage system should be in place to identify the potential severity of a claim. The one-size-fits all approach to subsidence claims employed in the famous hot summer of 1976 is not appropriate in 2018.

If the cause of the subsidence can be identified quickly and the damage is localised, extended monitoring is not necessary. If a tree is on the policyholder's property and is not subject to a tree preservation order (TPO) it should be possible to remove it quickly and repair the damage. Having a supply chain of contractors that can respond quickly limits the complexity of the claim and the potential for any amplification of cost or time. In this scenario, the customer benefits from a one-touch solution and is not subject to multiple visits.

If the tree is on a reluctant neighbour's property or subject to a TPO, this will complicate the process. Greater investigation may be needed to prove that the tree is the cause of the problem.

As it is necessary to provide evidence to local authorities that there is little or no prospect of the soil rehydrating and the subsidence stabilising or rectifying itself to win approval to remove a tree, the timing of the investigation is crucial.

Subsidence may stabilise in the wet winter months but if the tree or vegetation that was causing it is not removed, the problem will return with the following year's dry weather. As soon as a claim is notified it is important to move quickly and to gather evidence before autumn rainfall arrives.

Where there is a TPO in place or if a street tree is the cause, early engagement with the local authority is essential. Recent financial austerity measures have left many councils without dedicated tree officers and some have transferred the responsibility for dealing with requests to lift TPOs to their planning departments. This erosion of expertise could potentially slow applications down and is an issue insurers and adjusters should be aware of, while also keeping policyholders updated of potential delays.

APPROACHES TO MITIGATION

Just as monitoring has become more sophisticated, so has mitigation. However, applying the right solution backed by high quality technical advice is essential if claims are to be successfully resolved.

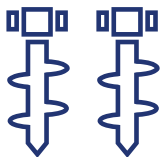
Underpinning remains the last resort for the most severe cases. It is expensive, intrusive and can greatly extend the length of a claim. The best option is usually to find the cause and deal with it, though choosing how to approach this is not always clear cut.

Many have argued in the past – and some still do – that regular pruning and pollarding can mitigate a subsidence problem. However, extensive horticultural research has proven that this is unlikely to work unless

the pruning is exceptionally brutal. Some research suggests pruning may even make the problem worse.

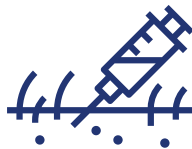
According to a paper published in the 'Journal of Building Appraisal', which reviewed the work done by HORTLink at East Malling Research: "Pruning within arboricultural industry guidelines is ineffective in controlling water use. The research clearly and unequivocally demonstrates that thinning has no effect at all. Only a crown reduction of over 70 per cent by volume, which equates to a 35 per cent crown reduction, has any effect and then it is for one season only (if that) and the reduced trees use more water in the following season".

Since 2003, new mitigation systems have been developed, including:



Perforated tubes buried at depth and screw piling.

These ground rehydration systems have their advocates but are relatively untried in severe subsidence cases. Research is being urgently conducted to prove their efficacy or otherwise.



Injection grouting.

As an alternative to underpinning, a solution is injected into the affected area which interacts with the soil, turning it into a form of concrete to provide stability. This too is unproven and has its limitations in clay subsoil. Clay is dense in normal conditions but as it shrinks it becomes even more solid, leaving no voids into which to inject solution.

While these new solutions are being explored, tree root removal, root barrier and (in extreme cases) underpinning remain the extreme forms of mitigation.

In previous surges, underpinning has been used quite extensively but according to the Building Research establishment this may have been unnecessary in many

cases. Insurers are often put under pressure by policyholders to underpin because they believe it is the only effective solution.

In theory, underpinning can cause a multitude of problems if not required or undertaken extensively.

This is where working with expert mitigation teams that know the

region, have good relationships with local authorities and a robust supply chain of contractors is essential. Making the right decisions at the triage stage requires genuine expertise and thorough knowledge: get that right and the path to mitigation should be smoother.

DATA AND MANAGEMENT INFORMATION



Once a claim is on the right trajectory, regular monitoring of its progress is essential if policyholders are not to feel abandoned or provoked into venting their frustrations on social media. Given the huge increase in the volume and sophistication of data that can be gathered today compared to 2003, there is more opportunity to provide informed updates on the claim.

The quality of management information available should expose where there are bottlenecks if the surge imposes strains on the supply chain, from arranging visits or producing reports to getting surveyors and arboriculturalists and other suppliers on site.

This depth of data and visibility of key information also means that reserves can be reported sooner and more accurately than in the past.

All the indications are that longer, warmer and, crucially, drier summers will be with us for a while. A new forecasting system developed by researchers at Southampton University, France's National Centre for Scientific Research and the Royal Netherlands Meteorological Institute recently predicted that the next four years will be "anomalously warm" as natural factors amplify the effects of man-made climate change.

If this prediction proves accurate, ensuring the right expertise, relationships and processes are in place to deal with higher levels of subsidence will be essential.

THE CRAWFORD APPROACH

Crawford's specialists are on the frontline providing innovative subsidence solutions that are built around "what matters" for each customer – from intelligent triage to the creation of distinct pathways to achieve the best outcomes for policyholders and insurers. We do this by utilizing:



Our claims system specifically designed for subsidence, with in-built quality control systems that ensure high quality and consistency and a transparent portal for both customer and client.



Effective cost management



Reduce your claims ratio **by 25%**



Settle claims **faster**



Bring to you **true value** added innovation – no gimmicks



Provide to your underwriters data analytics to improve the **quality of risk**



Provide **free consultancy** to jointly redesign with our award winning methodology



100+ subsidence consultants and advisors



Video streaming for rapid decision making



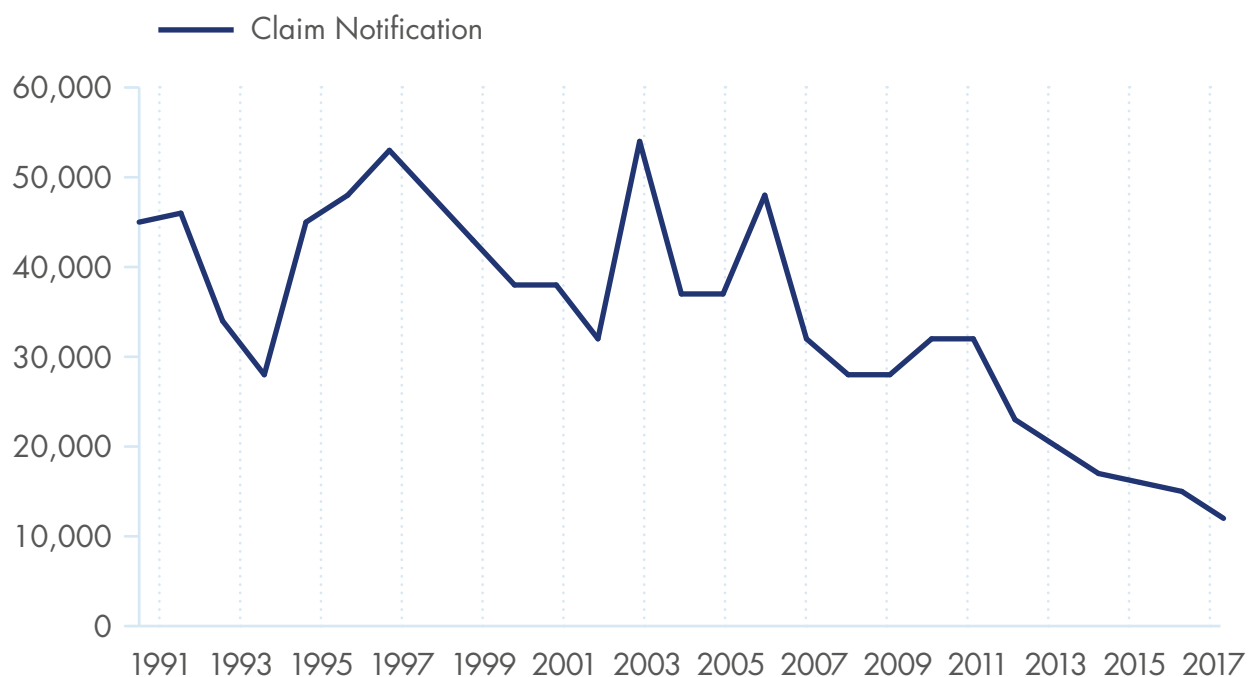
Data analytics, modelling, prediction and geo risk mapping

Our skilled subsidence experts are trained to solely focus on delivering best in class service and provide a gateway to the complementary skills of our RICS regulated surveyors via **Crawford Surveying Services** and managed repair solution, **Contractor Connection**. This integrated approach achieves consistent delivery, customer satisfaction, shortened claim durations, best value and technical accuracy.

Crawford subsidence professionals focus every day on not only managing claims with proficiency and technical expertise, but also with empathy. That's our mission: restoring and enhancing lives, businesses and communities.

1976 TO 2018: SURGES THROUGH THE DECADES

Since 1976 there have been two major subsidence surges – 1997 and 2003 – when the number of notifications peaked at over **50,000**, according to Association of British Insurers data.



Last year there were just over **12,000** new claims notified, the lowest since the ABI started collecting data.



Estimates suggest that this year claim notifications will rise to over **20,000**. The latest figure is already running at four times that of the corresponding period last year. **This would put 2018 firmly in peak surge territory.**

There is no comparable data for 1976, though there is an industry consensus that there were between **20,000 and 25,000** claims. The private housing stock has expanded considerably since then, not least because an estimated 1.5 million former council homes are now owned privately.

CLAIM TIMES

The length of time it takes to deal with subsidence claims has always been a source of friction between policyholders and insurers. Setting expectations right at the start of a claim is essential.

Typical claims on a semi-detached urban property might expect to run within the following timescales:



Homeowner's tree coming down

Monitoring, stabilising, removal and repair over **3 to 6 months** with costs of **£5000 to £10,000**.

Tree with a TPO

An additional **6 to 12 months** to evidence seasonal movement. If the local authority rejects a request to remove the tree, a further six weeks for the appeal process. Removal and repair can then only start once the tree is removed. Total time extended to **up to 18 months**.

Underpinning

Another 3 months for the design, tenders and appointment of contractor followed by around **3 months'** work. These claims usually take a minimum of **two years** and cost **£25,000 to £30,000**.

For further information on Crawford's subsidence solution, please contact:

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