

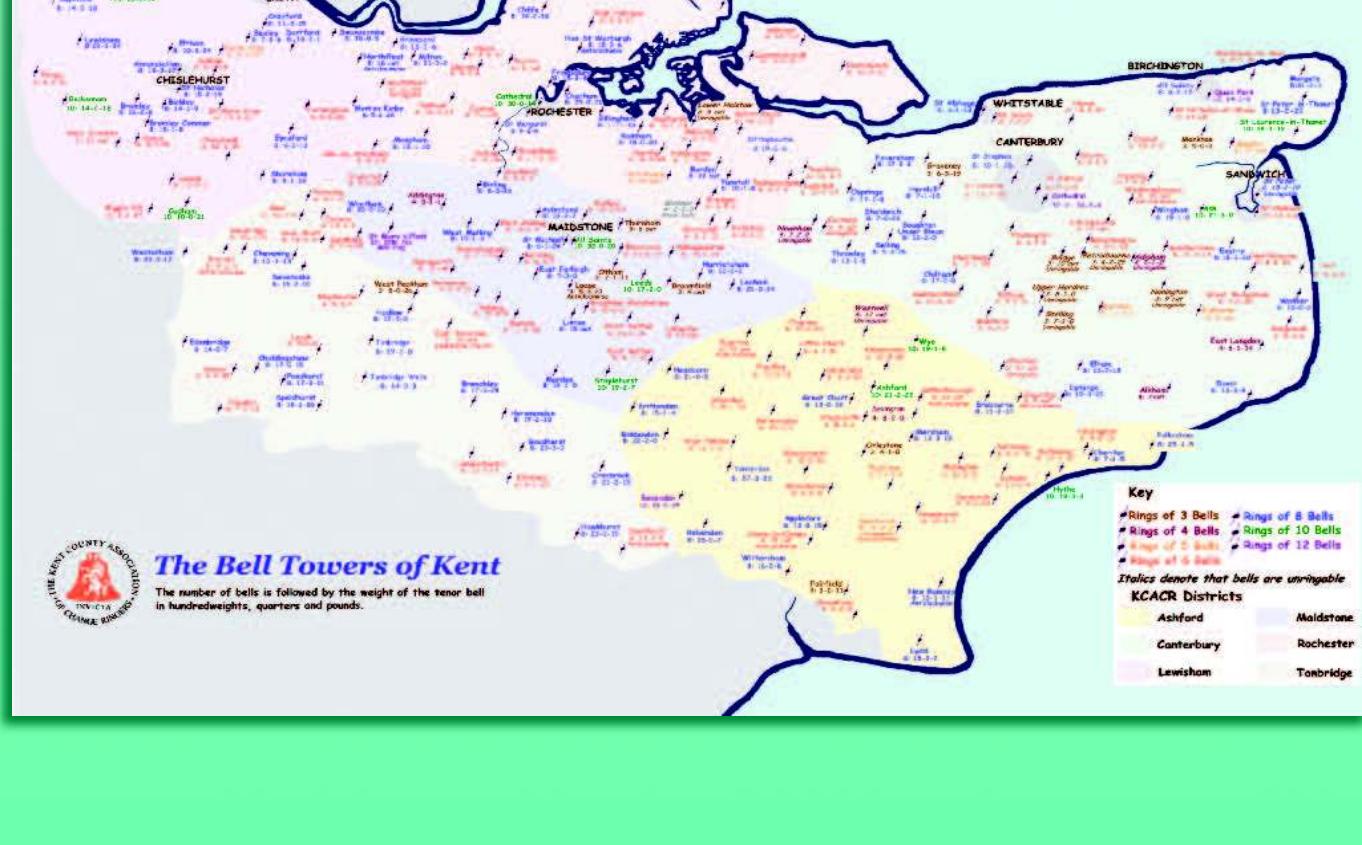
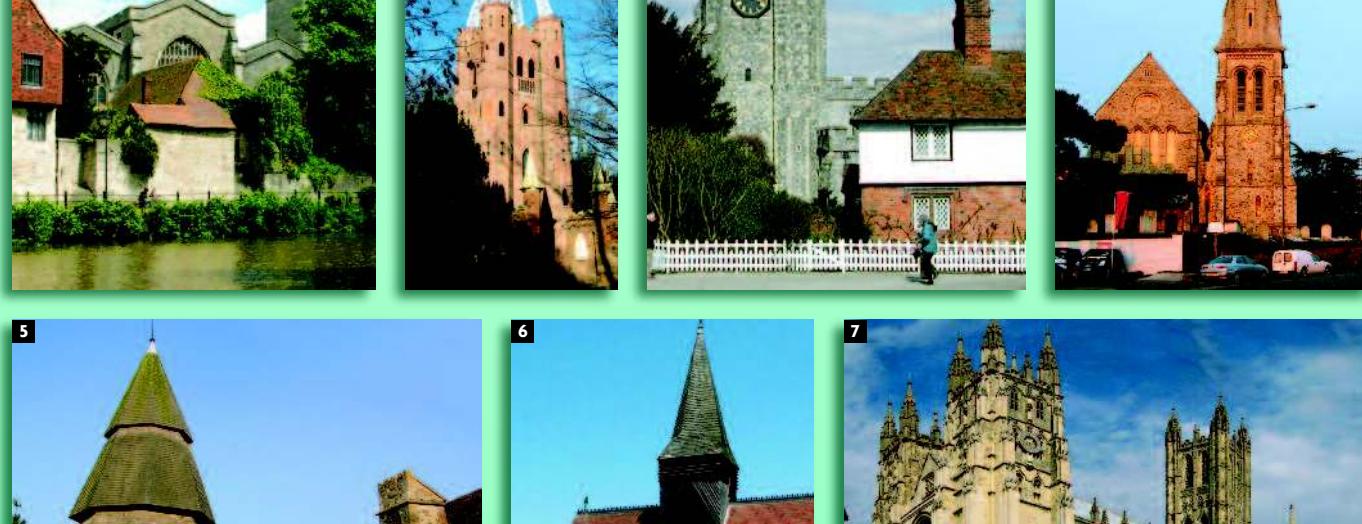
# 'I love ringing at so many different churches'

[www.kcacr.org.uk](http://www.kcacr.org.uk)

Kent has nearly 250 churches with four or more bells – in towns and villages, city centres and open countryside – one bell tower is on a private estate.

From tiny rural churches to great cathedrals, every tower belongs to one of the six districts of 'The Kent County Association of Change Ringers'.

- 1 All Saints, Maidstone – an unusual riverside view of a city centre church.
- 2 Waterloo Tower, Birchington – in the heart of Quex Park, the Powell-Cotton estate.
- 3 St Mary's, Chilham – a delightful village setting.
- 4 St John's Church – Eltham High Street
- 5 St Augustine's, Brookland – an extraordinary timber campanile.
- 6 All Saints, Foothill Cray – a remarkable 'dovecote' belfry.
- 7 Canterbury Cathedral – the South West tower houses the heaviest change ringing peal in Kent.





# 'You meet all kinds of people and they're all so friendly...'

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Change ringing usually takes place in churches because most peals of bells are in churches, although not all bell ringers are churchgoers

A bell ringer is welcome at any bell tower in the County, the United Kingdom, Australia, Canada, New Zealand, Southern Africa and the USA.

Bell ringing is an activity for all ages, and is well within the capabilities of most people. Many ringers regard it as their contribution to church life, while others do it for pure pleasure and the company it brings.



Ringing is an activity that the whole family can share.



Many ringers enjoy playing familiar melodies on handbells, such as carols at Christmas. This group is using them for change ringing. Ringers may practise change ringing on handbells at each other's homes, or any suitable meeting place.



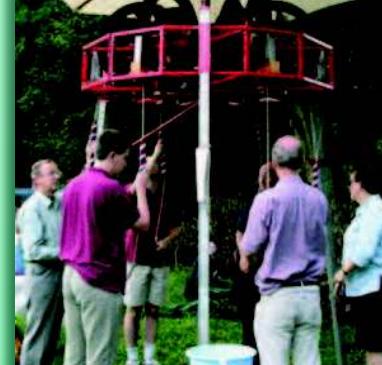
Ringing outings and tours are popular, especially in summer. A day's outing can involve ringing at six or more different towers; this tour group is visiting a bell foundry.



Ringers arrange other social events that can have no connection at all with bells. Sometimes they are organised to raise funds, and may include quizzes, pub games, buffet dances, and the occasional formal meal.



The Trafford Ring is a portable mini-tower with six of Kent's smallest bells hung for change ringing. It takes 40 minutes to erect it.



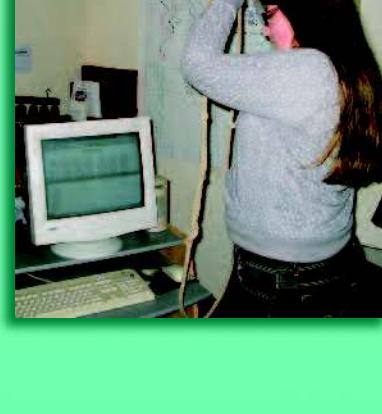
A tower bell can be silenced for training purposes. One way of doing this is to use a 'clapper stay', which locks the clapper in the centre of the bell.



Learning how to 'handle' a bell is a one-to-one process for the first few lessons. A basic proficiency may be gained after a few months, but to master change ringing can be a lifelong learning experience.



As an aid to more advanced instruction, some towers have electronic sensors on the bells. These connect to a computer that can synthesise bell sounds, allowing realistic practice on silenced bells without disturbing the neighbourhood. The computer can assist in a number of other ways to enhance the learning experience.



'Would you like to ring?'

[www.kcacr.org.uk](http://www.kcacr.org.uk)

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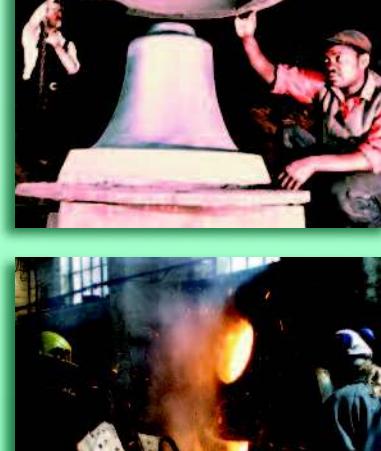


# 'It's the technology behind bells and bell ringing over the centuries that interests me...'

[www.kcacr.org.uk](http://www.kcacr.org.uk)

The basic process of casting a bell has changed little over the centuries. The mould is in two parts: the 'core', shaped to the inner profile of the bell, and the 'cope', giving the outer profile. These are prepared from a special 'loam', a mixture of clay, straw, goat's hair, and horse manure.

The cope is lowered on to the core and the two parts are clamped together. This leaves a bell-shaped space in between the two parts..



Bell metal is an alloy of copper and tin, roughly three parts copper to one part tin. To cast a bell the metal must be heated to 1200°C



When the molten bell metal is poured into the mould it fills the space between the cope and the core.

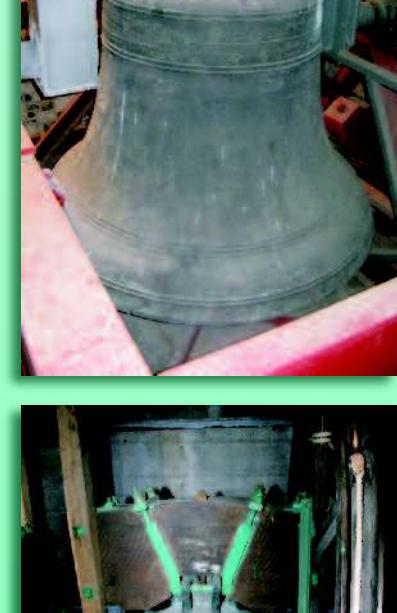


The 'strike note' that we hear from a bell is in fact a blend of five partial frequencies, each one tuned separately. Modern tuning methods use a vertical lathe, with the pitch being monitored electronically as metal is gradually pared away from the area being tuned.



A double-edged template, mounted on a spindle, is turned around each part of the mould in turn, to wipe off excess loam and shape the profiles. The loam is then baked at 150°C to dry and harden. Finally, inscriptions and decorations may be hand-crafted into the loam of the cope.

The largest bell in Kent is 'Great Dunstan'. Weighing more than 3 tons, it strikes the hour for the clock at Canterbury Cathedral. On special occasions it can be swung by electric motor.



The oldest bell hung for change ringing and still in regular use each Sunday, is thought to be the fifth bell at St Dunstan's, Canterbury. William le Belyetere, a local bell founder, cast it in about 1325.



The Kent County Association of Change Ringers has a skilled team of weekend volunteers who save Kent churches thousands of pounds by providing labour for major bell restoration projects. In addition, the Association can make grants from its own Bell Restoration Fund.





The four panels erected for use