

SELECTED CELLOS AND BOWS

LOUIS GUERSAN CELLO 1761

L.O.B: 29¼" (745mm) String length: 27¼" (690mm)
Price: £35,000

A beautiful cello in good condition, with a fine transparent orange varnish and exceptional tone.

J & J SIMPSON CELLO c.1780

L.O.B: 29¼" (745mm) String length: 26½" (672mm)
Price: £35,000

An exquisite English cello in very good condition with an even, deep tone and good projection.

BANKS SCHOOL CELLO c.1780

L.O.B: 29½" (752mm) String length: 26⅞" (682mm)
Price: £tbc

An appealing cello made by a follower of the Benjamin Banks school with a lyrical, rich, dark tone. The varnish is dark red over a golden ground.

JOHN MORRISON CELLO c.1800

L.O.B: 29¼" (746mm) String length: 27" (684mm)
Price: £24,000

A beautiful cello in very good condition with a strong, colourful tone and deep red varnish.

THOMAS DODD CELLO c.1800

L.O.B: 29" (738mm) String length: 26¾" (681mm)
Price: £18,000

This fine cello has a clear, rich and expressive tone and deep golden varnish.

COLIN NICHOLLS CELLO 1993

L.O.B: 29½" (750mm) String length: 26⅞" (683mm)
Price: £16,000

Modelled on a Fendt cello, this cello has a warm, luxuriant tone and is in immaculate condition.

MICHAEL KEARNS CELLO 1998

L.O.B: 29½" (749mm) String length: 27½" (698mm)
Price: £16,000

A responsive cello by a well-respected maker in very good condition. The tone is open and powerful.

MARK DEARLOVE CELLO 1847

L.O.B: 29½" (752mm) String length: 27" (684mm)
Price: £14,000

A handsome instrument with a rich, robust tone and beautiful dark orange-brown varnish.

GERMAN CELLO c.1850

L.O.B: 29¾" (754mm) String length: 27½" (697mm)
Price: £12,500

An elegant instrument in very good condition with an easy response, warm tone and golden varnish.

PRAGUE SCHOOL CELLO c.1900

L.O.B: 29¾" (750mm) String length: 27¼" (692mm)
Price: £tbc

A beautiful sounding cello in excellent condition. The varnish is orange-brown.

ISTVÁN KÓNYA CELLO 1998

L.O.B: 29⅝" (753mm) String length: 27¼" (692mm)
Price: £10,000

A stylish cello by a respected Hungarian luthier with a colourful, resonant tone.

MICHAEL WATSON BAROQUE CELLO

L.O.B: 29¼" (743mm) String length: 26¾" (679mm)
Price: £9,000

A pleasing baroque cello made in 1990 with a quick response and full tone.

GERMAN CELLO c.1890

L.O.B: 30" (760mm) String length: 26¾" (678mm)
Price: £8,000

A handsome cello with a rewarding tone.

Selected Cello Bows

F N Voirin	75.3g	£8,500
Dodd (classical)	70.0g	£4,500
Paul Sadka (gold)	78.5g	£4,400
K W Knopf	81.5g	£3,500
Stephen Salchow	82.4g	£3,110
Christian Wanka	81.3g	£2,970
Paul Sadka	81.6g	£2,800
Brian Alvey (gold)	79.2g	£2,700
Mike Maurushat	78.9g	£2,730
John Aniano	81.9g	£2,540
Robert Pierce	82.9g	£2,500
Bernd Etzler	82.0g	£2,500
Hill bow	75.0g	£2,200
Klaus Grünke	79.8g	£2,090
Ary Dargent	79.5g	£1,600
Rudolf Neudörfer	81.1g	£1,500
¾ Hill bow	67.4g	£1,500
J S Rameau	76.7g	£1,500
Bouman (baroque)	75.0g	£1,500
Brian Alvey	80.9g	£1,500
Lawrence Cocker	73.1g	£900
German c.1920	78.0g	£900
Penzel	80.5g	£700

NEWS FOR CELLISTS AUTUMN 2010

Humidity and Cellos

2010 was the most severe winter in Europe for thirty years and this spring we received a host of phone calls from cellists who were worried that their cellos had lost their tonal beauty and ease of response. We also spent a lot of time re-gluing seams which had opened during the harsh winter. Most of us are aware of SAD (seasonal affective disorder) and the havoc it can play on our moods but

cellos also suffer from seasonal changes. They don't mind the dark winter days but they hate the dry air in our centrally-heated homes when the temperature outside drops near or below freezing. On pages 2-3 we explore the foggy world of humidity, explaining how humidity affects cellos and how it can be controlled safely.

Website Feedback

We very much appreciate the generous feedback we receive from readers and we would be very interested to hear if you have any suggestions about how *News for Cellists* or our website might be improved. The majority of our articles have been inspired by questions and emails from cellists, so please feel free to bombard us with queries or ideas, to help *News for Cellists* and the website shed light on everything cello.

Extreme Cellists go Coastal

The intrepid Extreme Cellists (Clare Wallace, James Rees and Jeremy Dawson) have just successfully completed their latest cello challenge: the Coast-to-Coast walk from St Bees to Robin Hood's Bay, carrying their cellos along the 192 mile route and playing trios three times a day. We wish their blisters a speedy healing and send them our hearty congratulations for raising more than £4,500 for two charities, Aspire and PACT.

Aspire helps with the rehabilitation of people with spinal cord injuries; PACT is the Parents Association of Children with Tumours and Leukemia, a small charity based in Sheffield which provides a range of support services for families whose children have been diagnosed with cancer. If you would like to make a donation to either charity, you can find links and further details at <http://www.extreme-cello.com/Coasttocoast.htm>

You can also buy some hair-raising (and fundraising) photographs of the Extreme Cellists by contacting www.davidshapirophotography.com

The Power of Music

Sarah is planning to start researching the positive benefits of being a cellist and musician. If you know of any recent studies or articles on the subject, we'd be very grateful to hear from you. sarah@aitchisoncellos.com or phone 01353 668559

Cello Exchange

A large number of cellos have sold recently through the Cello Exchange and some wonderful instruments have also arrived for sale. We are still actively seeking further cellos as we have a long waiting list of hopeful buyers. So please do let us know if you'd like to show us an instrument for possible sale through the Exchange. For full details of the way the Cello Exchange system works, see: <http://www.aitchisoncellos.com/celloexchange.htm>



HUMIDITY AND CELLOS

The level of moisture or humidity in the air affects the tone and condition of cellos because wood is porous and will - like a very stiff sponge - automatically adapt to the humidity in the air around it. When the level of humidity in the air rises, wood expands as it takes in some of the increased moisture; when the humidity drops, moisture is leached from wood by a process of diffusion, causing it to shrink.

What is Relative Humidity? Relative humidity (expressed as a percentage) indicates the amount of water vapour held in the air at a specific temperature, compared to the maximum amount of water vapour that the air could hold at that temperature before condensing into dew, fog, rain or snow. 40% relative humidity means that the air is holding 40% of what it is capable of holding before reaching the dew point, when the moisture in the air will start to condense.

Fortunately, cellos are designed to adapt to modest changes in humidity because the arched shape of the front and back will rise and fall as the wood expands and contracts. However, even modest changes in relative humidity can have a noticeable effect on the sound of the cello and extreme changes can cause damage. The best humidity for your cello depends on the prevailing humidity level when the cello was last glued together and/or set up. Cellos are generally most comfortable between 40% and 60% relative humidity. 30% is too low for comfort and 20% is hazardous.

In dry conditions (below 40% relative humidity) the arching of the front and back will shrink down onto both ends of the sound post, which can make the response of the cello dry, harsh and excessively resistant. If the wood contracts further, stresses from the changes of shape will tend to build up near the top and bottom of the instrument because the arching is fairly flat in these areas and therefore cannot change shape. If these stresses increase gradually, the animal glue attaching the front and back to the ribs will release at the points of tension. The tone of the cello will suffer due to the newly-opened seams, but no damage will have been done to the plates. However, if a sudden and extreme reduction in humidity occurs and the seams do not come unglued, cracks may form in the front or back. Another common symptom of low humidity is a reduction in string heights; differential rates of shrinkage in the neck root cause the neck angle to change, encouraging the bottom of the fingerboard to rise up closer to the strings.

In conditions of high humidity (over 60% relative humidity) the cello may lose resistance and projection as the plates slacken and the sound post becomes too loose. The neck root will expand on the varnished side, thus making string clearances higher than usual.

Air temperature has a big impact on relative humidity. For example, if the relative humidity of the air outside in winter is 40% and the outside temperature is 8°C, as soon as the air moves into a heated house and is warmed to 20°C, the relative humidity of the air will drop to a dangerously low 18%. For this reason, the most hazardous time of year for cellos is during the winter months when central heating drives down the relative humidity of air which is already lessened by the cold conditions outside. Relative humidity in the USA plummets as low as 10-15% in heated homes and even in the UK, a centrally heated home on a freezing January day set to 20°C could drive the indoor environment down to a dangerously low relative humidity.

The best way to monitor humidity levels is to use a battery powered digital hygrometer in the room or case where you keep your cello. Hygrometers are not expensive and they are small and portable. If the humidity in your room is too low you can use a room humidifier but a far cheaper, simpler solution is to keep your cello in its case whenever you are not playing it and to use a case humidifier to keep the humidity at a suitable level. It is also sensible to use a digital hygrometer in your case so that you can check the environment around your cello and be reminded when you need to moisten your case humidifier. Built-in circular (non-battery powered) case hygrometers are notoriously inaccurate but some modern digital case hygrometers are very reliable.

Hygrometer test. We tested three digital hygrometers for this article: Planet Waves, Oasis and Stretto. Planet Waves consistently registered a lower humidity reading than either Oasis or Stretto and was also less sensitive to humidity changes. Since Stretto agreed most consistently with our control hygrometer, we chose Stretto as our favoured hygrometer, but Oasis was also very reliable and a little less bulky than Stretto. Further information about these models is listed at: www.aitchisoncellos.com/articlehumidity.htm

Humidifier test. We then tested three case humidifiers (Planet Waves, Stretto and Oasis) using Stretto hygrometers in three identical fibreglass

cello cases, placing a different humidifier in each case. We kept the cases in a humidity controlled room, left each case open for about one hour each day, and took daily readings from the three cases for seven days. We used large-sized Stretto and Planet Waves humidifiers in our cases; the Oasis humidifier is only available in a small size.

In this first test the Stretto humidifier was consistently the best performer. The Planet Waves came a credible second but the Oasis did not make much impact on case humidity at all.

In a second test we used Stretto as our control humidifier and compared its performance with a 'Dampit' style green snake humidifier and a homemade device made from a 35mm plastic film canister with holes drilled in the ends and a piece of dampened sponge inside. In this test the 'Dampit' style humidifier raised humidity even more than the Stretto during the first 24 hours but its performance soon dropped away. The home made canister device was inadequate for a cello case (its performance was similar to the Oasis).

This second test showed that the traditional 'Dampit' style humidifier has a powerful initial effect but it must be re-moistened daily to maintain its performance and it must also be used very carefully to avoid damage to the cello and varnish. The Stretto maintained its performance throughout the test period and we would suggest re-soaking its crystal bag every week. The Stretto is less likely to damage an instrument than a 'Dampit' style humidifier, as moisture is absorbed by a bag of hygroscopic crystals and cannot leak onto the instrument. (See an extended version of the humidity article on our website for more details).

Humidifier manufacturers recommend re-charging humidifiers with water every 1-2 weeks but the safest approach is to check the case hygrometer every morning when you open your case, and re-charge the humidifier if necessary. Another factor to consider is the air-tightness of your case; if the case is not well sealed or if you tend to leave it open for extended periods, you will need to recharge your humidifier more regularly. It is most effective to use distilled water in humidifiers so that the absorbent sponge or crystal does not get clogged up by mineral deposits as the water evaporates.

Case study. Colin Carr and his Gofriller cello travel between the UK and the USA many times a year in a busy solo touring schedule. Colin explains how he keeps his cello happy:

'Over the years it has become clear that the cello does not do well in extreme dryness or humidity, but I have gradually learned to control the environment around the cello so that I never have to worry about changing bridges for summer and winter. I use a room hygrometer as I find they are more accurate, and try to maintain my cello at 40-50% relative humidity. Whenever possible I use a room humidifier, but if the dryness is extreme I will use a Dampit as well. I always put a Dampit in when flying. In hotels, running the shower for ten minutes is an effective humidifier (keep the plug in so the humidity lasts longer). When I can't use a room humidifier I drape a large damp towel over the whole cello case with the cello inside. It's possible to raise the humidity in an instrument locker from 25% to 60% using this damp towel method and as long as the towel isn't dripping wet, there's no danger of over doing it. In hot concert halls I don't worry too much about the cello as I create a lot of humidity when I play!'

SYMPTOMS OF LOW AND HIGH HUMIDITY IN CELLOS

Relative Humidity too low (perhaps less than 40%)	Sound post is tight; point of bow contact moves further away from the bridge Increased resistance under the bow Treble response is harsh, bass response is constrained Tone may be strident: powerful treble response and unresponsive bass Seams may open
Relative Humidity OK	The cello plays normally
Relative Humidity too high (perhaps more than 60%)	Point of bow contact comes closer to bridge to achieve full tone when playing Less resistance under the bow Bass response is flabby or free; treble response is weak Tone may be over-resonant and lacking core Seams may open

NB If you think that your cello normally fits the picture of 'too low' or 'too high' relative humidity, your cello may benefit from adjustment. Try to monitor whether the cello sounds at its best when the weather is wet or dry and find a luthier to help. Further information about humidity, humidifiers and hygrometers can be found on our website at: www.aitchisoncellos.com/articlehumidity.htm *The cartoon on the front cover is by Michael Edwards.*