

# My Voice is Changing!

by Christopher Bell



Useful information for boys, choir directors,  
and parents before and during voice changes

**NATIONAL**  
**YOUTH CHOIR** of  
**SCOTLAND**



## National Youth Choir of Scotland

The National Youth Choir of Scotland was formed in 1996 to provide an opportunity for young singers in Scotland to participate in choral singing at a national level. The first residential course for NYCoS at Glenalmond School in Perthshire involving 55 members established the pattern which, although expanded, is largely unchanged since then. During the course 80 singers undertake a mixture of sectional rehearsals, full rehearsals and individual singing lessons with recreation periods in the afternoon.

Since then the activities of the organisation have expanded dramatically. NYCoS activities include:

- National Youth Choir of Scotland for singers aged 16-25  
Annual residential course and concerts.
- NYCoS Training Choir for singers aged 16-19  
Annual residential course and concerts
- NYCoS National Boys Choir for singers ages 10-16  
Annual residential course and concerts
- NYCoS National Girls Choir for singers ages 12-16  
Annual residential course and concerts
- NYCoS Area Choirs in a variety of locations across Scotland  
Weekly rehearsals and concerts
- Publishing resource material for use in schools
- Organising Staff Development opportunities for teachers and choir leaders

For a more detailed history of NYCoS and a comprehensive list of our activities please visit our website at [www.nycos.co.uk](http://www.nycos.co.uk)

# My Voice is Changing

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National Youth Choir of Scotland  
The Mitchell Library,  
201 North Street,  
Glasgow G3 7DN

Telephone: 0141 287 2856

e-mail: [admin@nycos.co.uk](mailto:admin@nycos.co.uk)

[www.nycos.co.uk](http://www.nycos.co.uk)

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My Voice is Changing © Christopher Bell 2001

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What is this booklet about?

As a boy, the time when your voice starts to change is an exciting one - most boys are quite happy to be growing up and developing into young men. However, it is also a time of uncertainty - you cannot be sure what your voice will do, and occasionally it does embarrassing things! This is not helped by a lack of knowledge as to what exactly is happening to your voice as it changes. There is very little information available in a readily accessible form to help you through this change and answer any questions you may have, hence this booklet. It starts with answers to some of the questions that are frequently asked by boys as their voices change. Then there is an explanation of terms used when talking about voices and the changes. Finally there is a test section which you, or your teacher, can use to keep a record of how your changing voice is progressing.

Let's start with the questions and answers.

I'm getting older and people tell me my voice will break. What do they mean?

It won't break but it will change. Your voice will go through some changes along with changes in your body. People used to call this process the breaking of your voice, but that's not a good word. Things that are broken need to be fixed and your voice doesn't need fixing: it's just developing as you grow.

What is happening to my voice?

Your vocal folds (used to be called cords) are growing. As they get longer and thicker and your larynx (Adam's apple) gets bigger, the pitch you can produce will get lower and the sound will be thicker. Unchanged vocal folds are like small, flexible elastic bands and changing vocal folds are like progressively bigger and thicker and less flexible elastic bands.

Do all boys' voices change in the same way?

Recent research suggests that there are five main stages of the changing voice. All boys move through the stages, but like many other parts of growing up, each boy moves at a different rate.

How long will it take to change to my grown-up voice?

Some boys' voices change very quickly and others at a more gradual

pace. There is no set length of time. You will notice among your friends that their voices begin to change at different times. Some people start earlier than others and some people start very late indeed. (The youngest recorded change is 9 years old, and I can remember hearing a boy of 17 still singing the top part in the choir.) There is no set age to start, or finish, and in fact the voice takes many years to develop and settle down - you'll be in your twenties before it has settled completely.

What are the five stages?

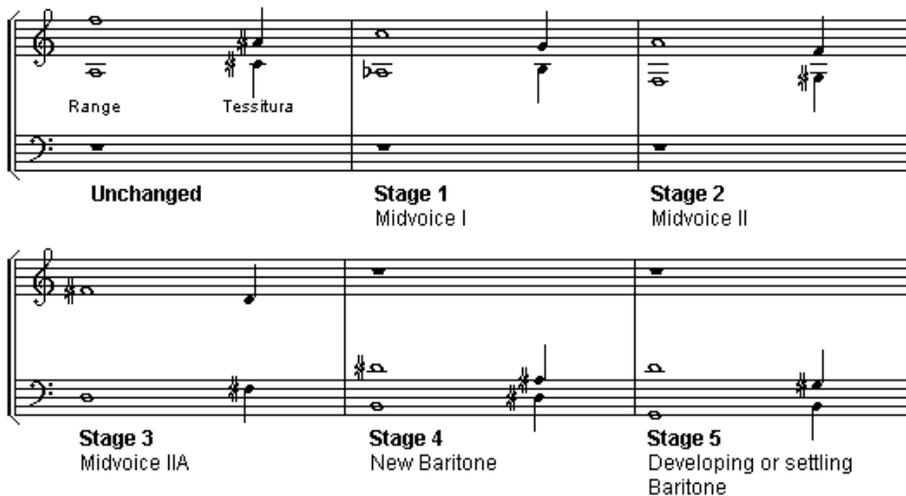
They've got very technical names. First the voice is Unchanged, then:

- 1) Midvoice I  
The first change begins at the same time as the changes to your body begin. Some higher pitches are lost, and the tone quality will sound a bit thinner. You may not really notice this stage.
- 2) Midvoice II  
Lower pitches begin to appear in the voice. The quality of the voice is thicker, darker and less resonant.
- 3) Midvoice IIA  
This is probably the most difficult period of your voice change - the instrument is at its most unstable, and while you have some lower notes that sound quite like a man's, the upper ones may be very breathy and strained. Best to be careful here - don't strain!
- 4) New Baritone (also called New Voice)  
The lower pitches become a little stronger, and perhaps you can sing down to a bottom B or A. You won't have much vibrato, if any. Your voice will feel more stable, though you may have a small area in your higher range that seems to stop working. Don't worry - that's not a problem. This blank spot is common and the voice will return.
- 5) Developing, or Settling, Baritone (also called Emerging Adult Voice)  
The quality of your voice becomes more clear and focussed, still largely without vibrato. From this point, time will help your voice to settle completely.

Note: the title Baritone here doesn't really equate with the adult Baritone voice.

Look at the diagram below for the ranges and tessituras for each of the voice change stages.

### Ranges and Tessituras for the Voice Change States



How long will it take for my voice to change?

Research has shown that the stages are sequential, very predictable and likely to last for a specific time: stage 1, 6-9 months; stage 2, 12-14 months; stage 3, 2-4 months; stage 4, about 9 months. As with a lot of things to do with growing up, though, there are many exceptions to this timescale - you may be faster or slower than this.

I'm still singing now, but I can't manage all the notes in the choir.

Your voice needs time to finally settle, and for the range to expand. Your body, and the resonant cavities in it, is still developing and growing, and as it does your voice will also continue to grow. (See the diagram overleaf, which shows the resonant spaces in the head.) Your range will expand, and notes that were harder to sing at one stage will become easier. The main rule is still NEVER FORCE or STRAIN, and never let anyone encourage you to do so. That can only cause damage. And as for the notes in the choir? History has dictated the range of notes that are sung by the different voice types like Alto, Tenor, or Bass and these ranges rarely fit the changing voice:

some music has been specially written to fit the range, and this is very satisfying because you can sing all the notes in your part. It's one of the factors in the changing voice that choir directors and composers are starting to understand a lot more.

Sometimes my voice "cracks." Sometimes I can't control my sound like I used to. Why?



Firstly, "cracking" is just a term that's used for the sound that comes out - nothing in your voice is actually cracking or splitting. These odd things happen mainly because of two kinds of change that are happening.

- 1) Muscle memory and your perceptions of the pitch you are trying to sing.

When you were learning to sing, your body had to learn what to do in order to make certain notes. Over the last few years, when you wanted to sing, your body remembered - we call it muscle memory - what to do in order to make the sound you wanted. But things have changed and the same procedures make a different sound now, and until your muscles get used to the changes, your voice may make unexpected sounds. This instability will settle down in time. Sometimes when you try too hard to sing the upper notes, this creates undue pressure on the vocal folds. When they suddenly give way, the cracking sound occurs.

- 2) Difficulty moving from register to register (look up - head voice, chest voice, modal, falsetto, whistle)

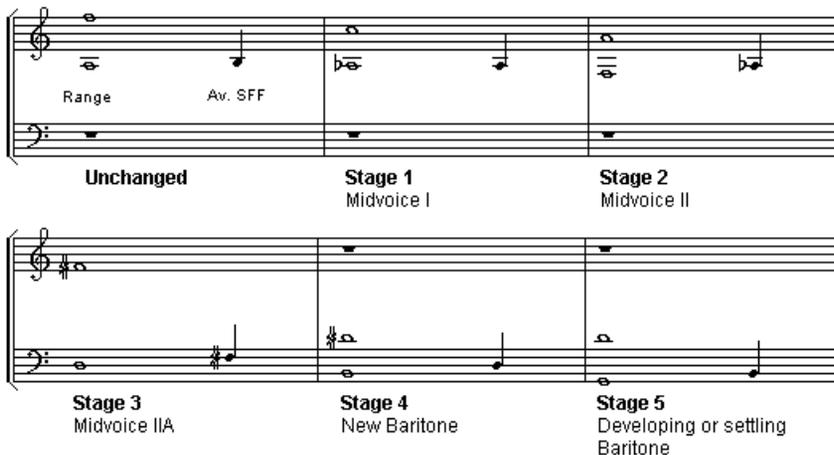
When you were younger, you learnt to move from register to register in the most musical and even way, trying to avoid dramatic

changes in the sound you made. Because of the physical changes you are going through, these moves are more difficult to do. Once again time will help sort this out.

What happens to my speaking voice when my singing voice changes?

The speaking voice actually has pitch which experts call the Speaking Fundamental Frequency. Of course we move away from that as our voices rise and fall to express the things we want to say, but the average pitch is the SFF. One way to hear what this SFF might be is to ask someone to count backwards from 20 to zero. He is usually thinking so hard about the numbers that he doesn't put much expression into the sounds he makes and you can hear what his SFF is likely to be. Look at the diagram below.

### Ranges and Average SFF for the Voice Change States



You can see here that as your voice changes, the SFF will become lower, not so obviously at first (Midvoice I) but more so in the later stages. Your voice is likely to become husky and sound a little thicker in quality during Midvoice II and IIA, settling in the later stages and developing more resonance. Occasionally in speaking you will experience the cracking mentioned to do with singing. Don't be alarmed or embarrassed - it's a sign you are growing up and not that something is wrong.

Will I turn into a tenor or a bass?

Once again we can't tell you yet. In certain stages of your changing voice you will be able to sing lightly the notes usually given to the tenor section. However this doesn't mean that you will be a tenor. It is just a stage you are passing through. After that you will be able to sing in the baritone range. Over a period of time, as your voice settles down, a good singing teacher will be able to advise you where your best range is.

Some men sing in a very high range - what are they doing?

They are countertenors or falsettists. Falsetto is a singing technique whereby only the top part of the vocal folds is used, with the rest of the vocal folds held rigid. Because of this the pitch is much higher, and sounds to some more feminine than masculine - however, close listening would let you know that it could only be a countertenor or male alto. It's a very characteristic sound. Falsetto singing is a stressed way of singing, indeed a high-risk vocal activity, due to its inefficient use of breath, its dehydrating effect on the vocal folds and the strain on the arytenoid cartilage which moves the plane of the vocal folds. Experts in the changing voice suggest that you should not sing using falsetto in early stages of your changing voice - stages 2, 3 and 4 - as you'll tire very easily, you'll strain what notes you can sing, and you may even delay the development of your adult voice.

Have these people had an operation?

No. There is a difference between those voices described above, and castrati. This operation to preserve a boy's voice and prevent him from developing a male voice is no longer practised - today's countertenors and male altos have had no surgical operations.

Should I sing whilst my voice is changing?

The million dollar question. If your voice is really not sure what it is doing (you go to sing a note and some wild yodelling sound comes out) it is probably best not to sing - let it settle down for a few months. If your voice is gradually changing, and its range lowering slowly, it could be possible for you to sing the alto part (this happens a lot in choirs in mainland Europe). Once you are into the fourth and fifth stages, New Baritone and Settling Baritone, you can certainly sing. There are lots of solo songs that will suit your range, and a good singing teacher will help choose these with you. While you are singing make sure you don't strain or force your

voice. If you haven't got the note, higher or lower, it won't suddenly pop out if you push a bit harder! The rule is to sing only those notes in a part which you can comfortably sing. Don't strain or push your voice too hard.

Can I damage my voice?

There are many ways to damage a voice. Wild shouting, rugby match or parade ground style, can really destroy the changing voice. Singing on a very sore throat, or whilst you have a throat infection, can also cause damage. Experts are also concerned that continued use of the falsetto, certainly during stages 2, 3 and 4, is likely to damage or delay the development of the adult voice. It should not be used until stage 5. The most important thing is that while your voice is changing you should not force it, either in volume or in range - you can't make yourself sing lower or higher notes if they have not developed yet, so if they don't come out, don't worry: give it time.

Should I have singing lessons, and how soon?

Once your voice has settled you should certainly have some lessons with a teacher who is used to working with young voices. A good teacher will know whether it is time to start having lessons or whether you should wait a little bit longer.

## Explanation of terms

### Voice types

treble	high voice, particularly of a child - usually used to denote a boy
soprano	the highest female voice
mezzo soprano	literally half soprano: a female voice between soprano and contralto
alto/contralto	a low registered female voice
tenor	highest range male voice not including countertenor
countertenor	singing with a well developed falsetto
baritone	male voice with range between bass and tenor
bass-baritone	higher in range than the bass but retaining the bass quality on lower notes
bass	the lowest male voice

### Technical terms

breaking	a term that used to be used for the changing voice - it is not breaking, but changing, so we prefer the term "changing" today
chest voice	lower notes seem to be made in the chest, and have a darker, thicker quality
cracking	a vocal instability that leads the voice to jump pitch suddenly and wildly
dynamic range	the extremes of loud and soft define the dynamic range
falsetto	the sound that comes out when your voice cracks or yodels and jumps up to the pitch of a female voice.
head voice	high notes seem to be made in the head and have a light, ringing quality
larynx	place where the vocal folds are set (voice box)

modal	your normal speaking and singing vocal range
passagio	sometimes, when you sing up a scale, your voice seems to “change gear” and the tone can therefore be unstable and unclear.
pitch	the absolute level of a note
range	the compass of the voice
register	area your voice seems to originate from - head voice, chest voice
SFF	Speaking Fundamental Frequency - the average speaking voice pitch
tessitura	the most comfortable part of the voice, where it lies best
vibrato	slight oscillation of the pitch of a note which gives it warmth
vocal folds	sometimes referred to as cords - muscles that vibrate to create the sound
whistle	when you can sing a very small, high sound that is nearly off the top end of the piano!
wobble	excessive and uncontrolled vibrato

## Voice Test

Provided here is a chart for you to use to note down the results of your voice test. You need a teacher/choirmaster who understands the procedure to help you, as it is very hard to test your voice yourself.

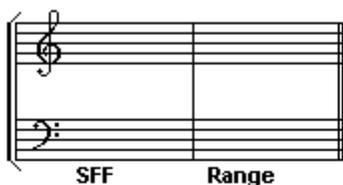
- 1 Finding your SFF. Count backwards from 20 - your teacher can identify the SFF.
- 2 Test your current range. Starting from your SFF pitch, use an open vowel sound and move down and then up the scale stepwise to determine the lowest and highest notes in the singing range. Note: be careful that as the SFF has been determined as a speaking pitch that you actually sing to test your range.
- 3 Compare your SFF and range with the assessment chart. This should help you to identify what stage your voice has reached. Whoever is listening must be careful to note if the voice changes into falsetto - it's the regular normal sound you want to identify.

Date of test \_\_\_\_\_



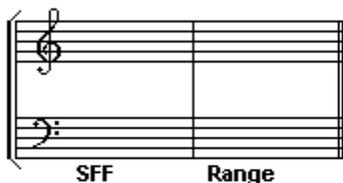
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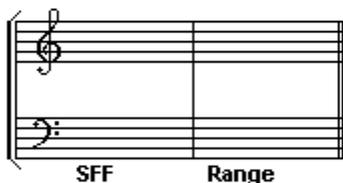
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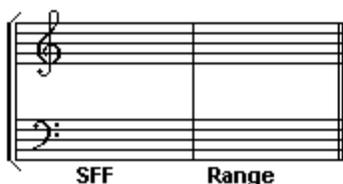
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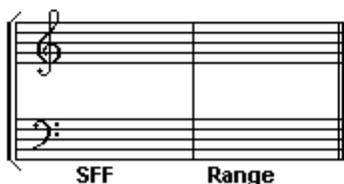
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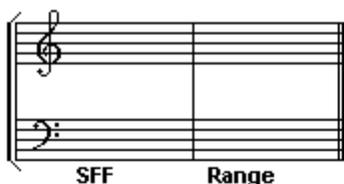
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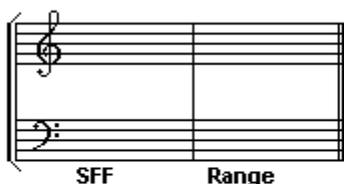
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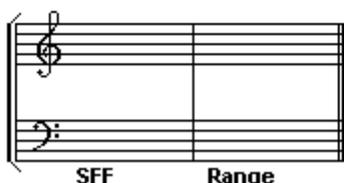
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Christopher Bell is Chorus Director of the Grant Park Chorus, Chicago, USA, Chorusmaster of the Royal Scottish National Orchestra Junior Chorus and Artistic Director of Children's Classic Concerts. He is largely responsible for the formation of the National Youth Choir of Scotland in 1996 and has been its Artistic Director since then.

Born in Belfast, Christopher was educated at Edinburgh University and held his first orchestral post as Associate Conductor of the BBC Scottish Symphony Orchestra between 1989 and 1991. Since then he has worked with many of the major orchestras in the UK, Eire, Australia and New Zealand. Between 1997 and 1999 he was Principal Guest Conductor of the State Orchestra of Victoria, Australia.

He was chorusmaster of the Royal Scottish National Orchestra Chorus between 1989 and 2002, and Music Director of the Ulster Youth Choir between 1999 and 2004. As a guest Chorusmaster he has worked with the Netherlands Radio Choir, the Opera Australia Melbourne Chorus and the Melbourne Chorale in Australia.

For his work with singers, and particularly his encouragement of young singers in Scotland, Christopher Bell was awarded a Scotsman of the Year 2001 award for Creative Talent. In 2003, he was awarded the Charles Groves Prize for his contribution to cultural life in Scotland and the rest of the UK.



# My Voice is Changing!

by Christopher Bell

My voice is changing is a booklet for boys which aims to answer those questions uppermost in their minds at this important time. Information is organised in an informal question and answer format and there is a useful chart to assess progress as the voice is changing.

Packed with information for :

- boys before and during voice changes
- choir directors
- parents

I warmly welcome the publication of this booklet which gives excellent and much needed advice in a most readable form.

Sir Philip Ledger  
(former Choir Director, Kings College, Cambridge)

I thought that your booklet was very interesting... very helpful.. I did understand what my voice was going through a bit more after I had read it.

Jonathan Kean ( aged 14)

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The National Youth Choir of Scotland  
The Mitchell Library, 201 North Street, Glasgow G3 7DN  
Tel: 0141 287 2856 Fax: 0141 287 2858 e-mail: admin@nycos.co.uk  
www.nycos.co.uk