



BASSOON SURVIVAL GUIDE

FOR THE NON-BASSOONIST BAND DIRECTOR

A guide for the things you should have learned (or should have remembered) from college.

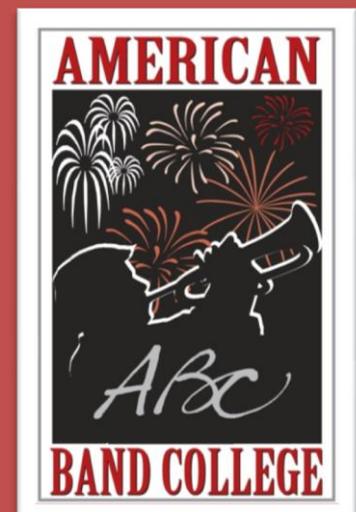


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Completed in partial fulfillment of the Master of
Conducting degree at the American Band College of Sam
Houston State University.



American Band College
of
Sam Houston State University

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A Guide for the Non-Bassoonist Band Director

Practical Application #1
American Band College
Sam Houston State University
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PREFACE

Why this project?

Like myself, there are so many band directors who do not play the bassoon that wish they could help out their struggling (or even advanced) bassoonists but don't have the knowledge or tools to help. We try to use methods specific to our own primary instrument, but most of the time will not cover key elements to a bassoonist's success and therefore hinder more often than help. This is a practical, easy, and effective way to aid someone in the nebulous and terrifying world of double-reeds; specifically, the bassoon.

The bassoon is truly like no other in the wind band or orchestra. Not only is the fingering system complicated, but the double reed is a unique implement of vibration common only to bassoon and oboe. Brass instruments use lip vibration into a cup-shaped mouthpiece as a sound mechanism and the remaining reed instruments use a single reed as a means to produce their sound. When using the double-reed, one must produce an embouchure unlike any other instrument in the ensemble, so when a non-double reed playing director has someone starting on the bassoon or inherits a weak bassoonist, they are overwhelmed with the fear that they cannot help this student on their own because the pedagogy is so foreign to them.



This handbook serves to relieve the “fear” of the unknown and arm the non-bassoonist with tools and methods to improve the quality of the low double reeds. Since the scope of this project is aimed at the practicality side of band directing, many in-depth issues of musical etudes, reed construction, repertoire and advanced techniques are purposely left out. This should be a brief, concise way for a director to instantly know how to recognize, evaluate, prescribe and fix a problem with bassoonists at virtually every level in their band program. As a tuba player, I will consistently show the methodology in terms that a non-bassoonist will recognize and in turn be able to use with their own students.

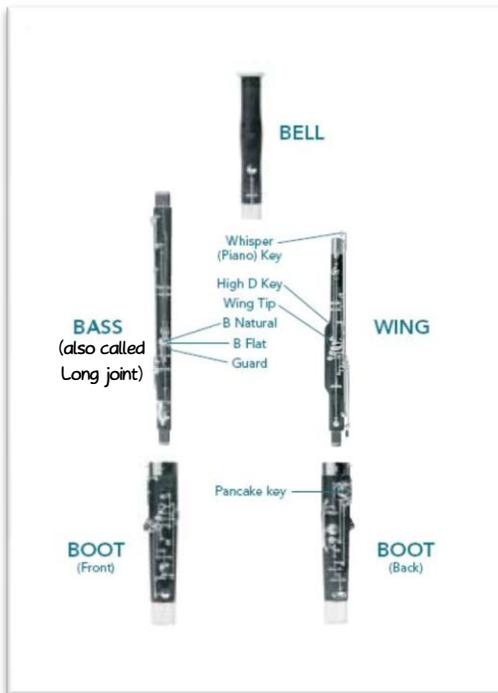
The bassoon is a beautiful band and orchestra instrument and should not be a source of fear for the non-bassoonist. You cannot have the classic wind orchestra sound without the beautiful sounds that emanate from the low woodwinds. With a few simple tools, my goal is to educate and offer a sound approach to benefit all directors who wish to help out a vital instrument in their program.



THE BASICS

THE BASSOON

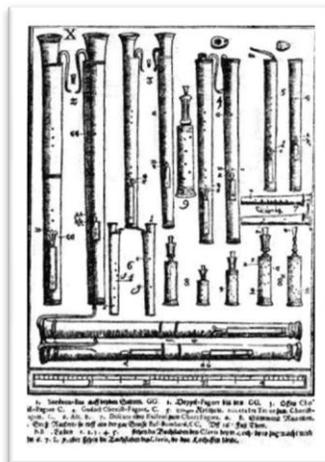
The Body © Fox Products Corporation



Bocal - Fox CVX 3



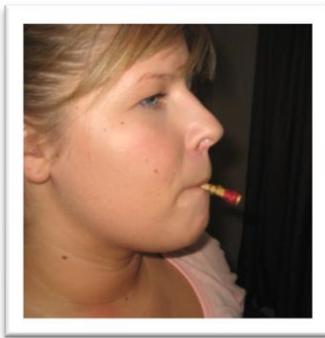
Reeds



THE BASICS

EMBOUCHURE

Probably the biggest misconception is the idea of the embouchure for the bassoon. Since brass and single reeds use a firm embouchure, we think the same will likely apply to the bassoon. The bassoon embouchure is a **SOFT** embouchure using only enough pressure from the jaw to support the reed.



To produce the proper bassoon embouchure, place the reed on the lower lip and roll in drawing both the lower lip and upper lip in with the reed. The upper lip should reach almost to the first wire and the jaw should be in a slight overbite formation. The hard part of the reed should be down towards the lower lip because of the "pressure" exerted by the jaw/lower lip. This will help balance the reed when air and embouchure pressure is applied.

The essence of proper bassoon sound is air and embouchure balance as it is with most instruments. The harder we blow, the higher the pitch. The tighter the embouchure, the higher the pitch. The opposite works with blowing too soft or not firming the embouchure enough (pitch will go flat). The bassoonist should always strive for the optimal air and embouchure balance at a comfortable dynamic while allowing the reed to blow freely.



THE BASICS

EMBOUCHURE, CONT.

Starting with the reed attached to the bocal, the student should produce a "C" with ease. If the pitch is too low, ask the student to either apply more pressure or support with more air depending on the sound. If the pitch is too high, the embouchure is too pinched or the air may be too fast (likely the former rather than the latter).



Don't be too tight with the
bassoon embouchure!!



THE BASICS

Instruments

Just like any other instrument, you want to buy the best instrument you can afford. If your program can afford a brand new, top-of-the-line wooden instrument, then you should certainly buy it.

Plastic versus Wood

There is no major discernable difference in the sound of a plastic versus a wooden bassoon. However, a wooden bassoon, with proper care, will improve in tone quality as the wood ages (difficult considering temperature/humidity/care changes over many years). The school music program with limited resources should certainly go for the ease and durability of a plastic bassoon to save money.

For a new student model instrument, you need to spend approximately \$3,000 - \$5,000. You do not need extra keys or rollers, only for Low C# and Eb keys and F and G# keys. The best investment to make into a bassoon is to upgrade the bocal and fix the instrument you already have. Some good used bassoons are (European) Kolert, Adler Sonora, Puchner and Moennig, and also (American) Fox, Conn and Berdon.

For a new student-line instrument, you can't go wrong with the Fox 220. With a school discount from our local music supplier, we are about to purchase a Fox 222 with bocal and seat strap for approximately \$4,500.



THE BASICS

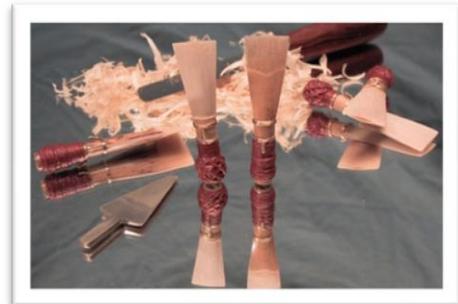


REEDS

The most fear band directors have about bassoon is likely with the reed. This is a simple mechanism that produces the entire overtone series in one simple "crow." With proper awareness, a director can assist a student who may be struggling with the notorious "reed issues" that can cause a distraction during rehearsal.



The tools every director must have is a pair of decent small needle-nosed pliers with a wire cutter and reed clippers or toe nail clippers and sand paper. From here, we can achieve almost every minor reed repair necessary for decent playing.



The tip of the reed should look like a flat smile. Most new, store-bought reeds will swell up when you first soak the reed, so the opening will become much too large. Conversely, a water-logged, old reed may close shut very quickly. The strength of the reed should be about a medium.

THE BASICS

REEDS, CONT.

Many directors want to know if a fiber-cane (plastic) reed will work. Fiber-cane reeds are ok to use at the start, but for no more than a few months. When I started a 5th grader on oboe, we used a plastic reed for only a couple weeks as it was such a heinous sound for everyone in the room and I didn't care much for the feel of the reed (at least from a tubist's perspective). I've found that the kids have a harder time going from plastic to cane simply because the cane makes them work harder, therefore changing the air/embouchure balance that we tried to achieve on their plastic reed. Bottom line, if you have a responsible, conscientious student, then a cane reed should not be an issue with proper care.



You should also take time to find a personal or online source of reeds. Store-bought reeds from a music supplier are never as good as a handmade reed, so encourage your students to buy the best they can possibly get. A list of online resources is available in the back of this handbook.



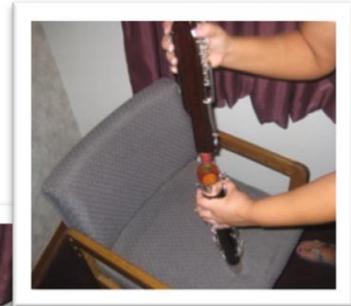
GETTING STARTED

ASSEMBLY



1. Bassoonists soak the reed differently than the oboe. You must soak the entire bassoon reed to get the proper tone quality (oboe soaks only the tip). Submerge reed in luke-warm water. Once the reed is in the water, begin assembly.

2. Take the boot and put the wing into it. Be sure to not damage the bridge mechanism and be sure to have a concentric circle with the Bass Joint hole. Always twist joints, *never push*.



3. Twist the Bass (Long) Joint into the other side of the boot. Attach the two joints with the pin.

GETTING STARTED

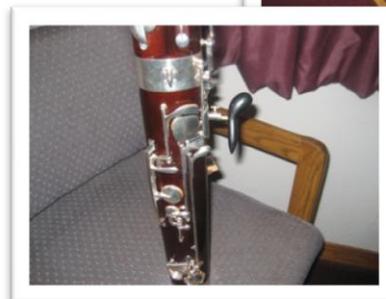
ASSEMBLY, CONT..

4. Attach the bell by aligning the bridge mechanism of the low Bb key. Again, be careful not to damage the keys. It is helpful to push down the Bb key to get the bridge aligned without any damage.



5. The bocal can now be placed on the wing. Push the bocal all the way in and be careful of the nib (whisper key) pad. When walking to and from the case with the bassoon, put the bocal in the bell as a safety precaution (NOT in the bocal hole, it could get bent).

6. Before sitting down to begin playing, be sure you have a seat strap and a crutch. Place the seat strap over the FRONT of the chair (not the middle) and be sure your bassoon has a crutch to ensure proper right hand position.



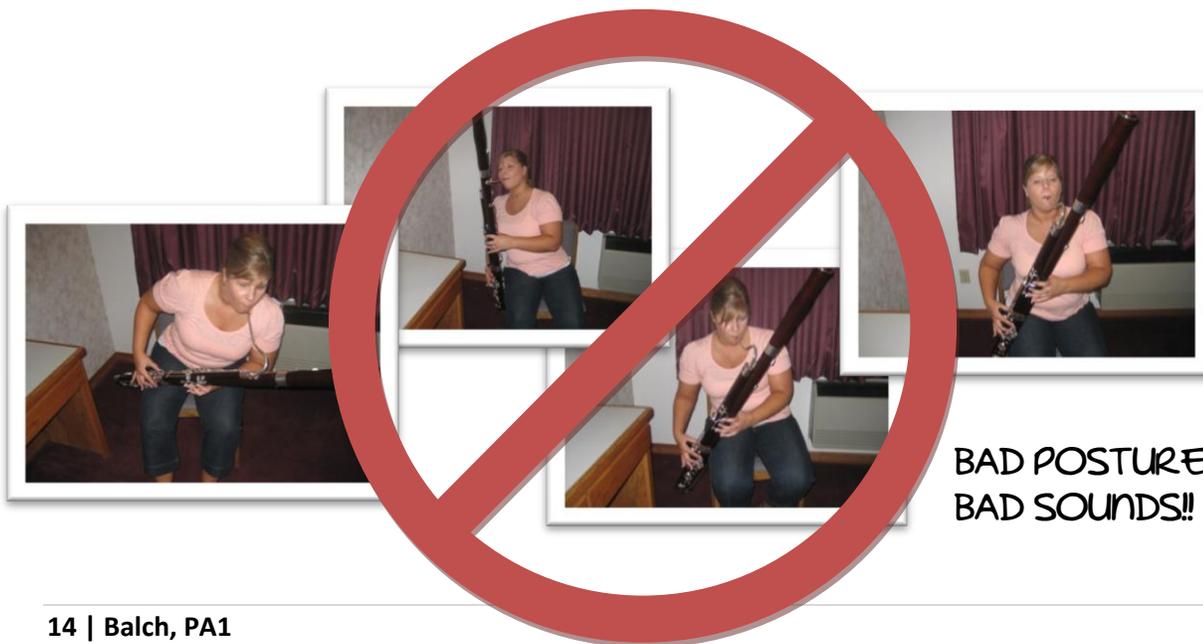
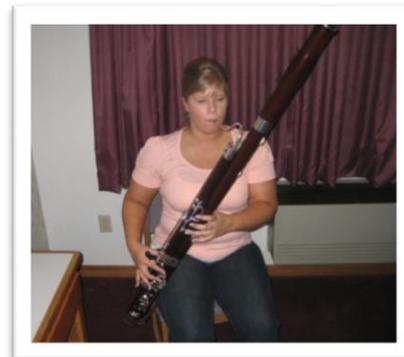
GETTING STARTED

THE FIRST LESSON



Set instrument down and begin with the reed and bocal. Put the bocal cork in your mouth and cover the end and whisper key holes to check that it seals. If it does not, it is no good and must be replaced. Attach the reed carefully to the end of the bocal and form the proper embouchure (see Embouchure). With enough air support to blow out a candle, play the first tone on the reed/bocal. Make sure the note is a flat C (remember to stay LOOSE). Adjust the air/embouchure appropriately until the pitch is achieved.

Now place the bocal and reed on the instrument (be careful of the nib pad on whisper key) and check the alignment of the instrument to the player. Make sure the seat strap is up to the front of the chair and the instrument is being brought to the student, not the other way around.



**BAD POSTURE =
BAD SOUNDS!!**

GETTING STARTED

FIRST LESSON, CONT.

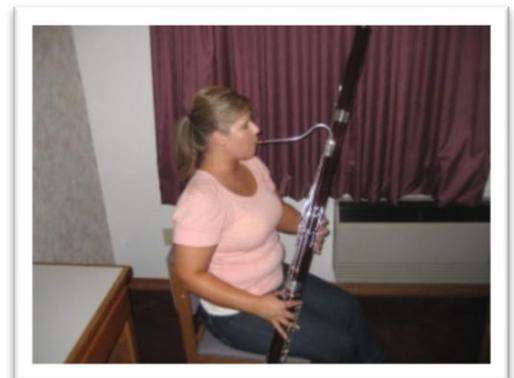


Make sure the right hand has a CRUTCH and the right thumb is not being used to balance the instrument (it should be hovering to play an open F). The left hand balances the instrument at the finger joint.

Continue to adjust the instrument so it becomes properly aligned to the student. Have the student get the instrument into proper position, and then start over to ensure that they know what that looks and feels like.

Things to look for:

- Correct body posture
- Bringing the bassoon to you vs. you to the bassoon
- Incline bassoon slightly to the left
- Arm, hand, finger positions are natural and relaxed (Left hand out from heart)
- Wrists are straight (elevate right elbow if necessary)
- Dropping the lower jaw and drawing the lips in, similar to a whistle

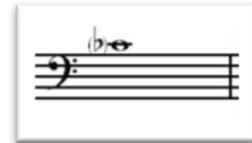


GETTING STARTED

FIRST LESSON, CONT.

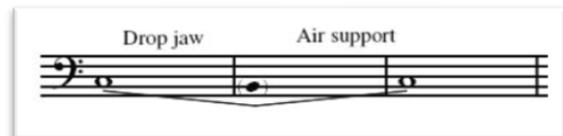
Producing the First Sound:

- Form the proper embouchure
- Take the correct breath
- Crow the reed – requires a very loose embouchure and open throat
 - If a single pitch is sounded, embouchure is too tight
 - It takes practice to produce a crow; the student may not be able to do this at first
 - This is good practice for the correct feel of the embouchure
- Play a flat C on the reed and vocal
 - If the pitch is higher than a C, the embouchure is too tight
 - It should sound like it is below the center of the pitch
- Start with open F, add fingers to produce E, D, then C
 - If notes do not respond, the fingers are not covering holes or the embouchure is too tight
 - First finger E will likely be flat.



Air/Embouchure balance exercise:

- Finger a C on the bassoon and slowly drop jaw until a B natural is produced
- Drive the pitch back up to C with air support
- This should help the student find the proper air and embouchure balance.



Continue with fingers all the way down to a low F. Embouchure must be loose to achieve this. If the note is flat or sounds more like an E, make sure the right thumb is not pushing down the pancake key (right thumb is not a balance point!). If the thumb is not the issue, then increase air support to bring the pitch up.

GETTING STARTED

FIRST LESSON, CONT.

Tonguing

- Tip-to-tip: Tip of tongue to the tip of the reed
- Tongue moves in an up and down motion
 - Say "Ta" a few times and notice the motion
- Move tongue as little as possible
- Don't tongue harder than the required articulation
- Ask the student if they feel the tongue on the reed.
 - If they are not tonguing, place tongue on reed, build up air pressure, then suddenly release the tongue
 - Gradually reduce the force of the tongue until desired articulation is produced

DON'T OVER
TONGUE!



5 IDIOSYNCRASIES OF THE BASSOON

WHAT MAKES BASSOON UNLIKE THE OTHER WOODWINDS:

Half-Hole

- Use for every note beginning with G (Gb, G, G#) in second octave
- Adjust amount of half-hole to clear up the tone
- Make sure student uses half-hole!
- Half-hole and whisper key go TOGETHER (don't want two octave keys open at same time)

Whisper Key

- This is an octave key in reverse
- Whisper key is DOWN in bottom octave to low F (pancake E and lower has bridging mechanisms that keep whisper key down)

Right Thumb

- Right thumb is NOT a balance point! The thumb should hover
- The crutch makes it difficult to have improper thumb position
- Watch for the crutch shank on the Fox 220 model
 - Way too long, may need to cut some of the shank off (use a saw)

Flicking/Venting

- Octave keys used to aid certain notes that the nib on the bocal is not good for
- Use especially for large leaps
- For A3, vent using the high A key
- For Bb4, B4, and C4, vent using the high C key
- Venting key can be opened at the beginning of the note or held down through the duration of the note

Extension Fingerings

- The Bassoon extends a 5th lower than the 7-finger low F (left thumb)
- Use low Eb key as a resonance key on anything above F4
- Also use Eb key on G3 to lower the pitch and improve tone
- Because of distance from first open hole, the low Eb key puts more tone into the long joint, therefore adding more resonance

BASSOON VS. OBOE – SIMILARITIES AND DIFFERENCES

BASSOON AND OBOE SIMILARITIES

1. Both are non-transposing instruments
2. Oboe reed plus staple (or bocal for the bassoon) should play a C
3. Tune with embouchure and reed, not with the instrument
4. Practice with reed plus bocal/staple alone is important at the beginning
5. Embouchure; slight overbite, drop lower jaw, or open mouth feeling corners toward center, supporting reed with muscles of lip not teeth
5. Air vs. Embouchure Balance; affects tone quality, intonation, and dynamics
6. Use of half-hole; all notes in second octave beginning with G for bassoon, D for oboe
7. Posture important; affects playing characteristics; head straight, especially on oboe

BASSOON AND OBOE DIFFERENCES

1. Need to cover oboe reed, let bassoon reed vibrate
2. Fingering system; bassoon, seven finger note F, oboe seven finger note C
3. Amount of reed in mouth; bassoon up to first wire, oboe very little (just enough to tongue)
4. Much air pressure on oboe, much air volume on bassoon.
5. Angle that reed leaves mouth; oboe downward, bassoon mostly straight
6. Balance Points: oboe right thumb is a balance point, not on bassoon
7. Amount of reed soaked in water: bassoon entire reed, oboe only scrape



ISSUES FACING THE YOUNG BASSOONIST

EMBOUCHURE PROBLEMS

Key things to remember on bassoon embouchure

- Soft embouchure to allow reed to blow freely
- Drop lower jaw
- Draw lips in like whistling
- Open throat
- Almost the entire reed goes in mouth (up to first wire)

Reed Crow, Correct Sound (CD Track 1)

- Full overtone series in sound – embouchure is relaxed

High-Pitched Crow with Too Few Sounds (CD Track 2)

- Embouchure is too tight/pinched – Decrease pressure in embouchure, relax
- Reed is too stiff/closed off – Check thickness of reed, balance cane

Low-Pitched Crow (CD Track 3)

- Lack of support – More support to *dampen* the reed
- Reed too long and/or too wide – change length and/or width of reed

Low F, correct sound (CD Track 4)

- Supported tone with full sound

Unsupported sound on low F (CD Track 5)

- Lack of support from lower jaw – slightly increase lower jaw support
- Lack of air column support from diaphragm – use faster air stream/more support from the diaphragm

Correct – Unsupported – Correct Low F (CD Track 6)

- OK – lack of support – OK
- None – needs more support – none



ISSUES FACING THE YOUNG BASSOONIST

FINGERING ISSUES

Break

- Bassoon breaks at F/F# which can cause problems in a passage that jumps between the two octaves

Basic fingerings

- G3 – very sharp, use Eb key to aid pitch and tone
- Eb 3 – Forked Fingering, do NOT use 12 C#
 - Correct fingering is W 13 5 Bb key
- F#2 – use key below pancake key, not front F#
- Bb – use thumb Bb, not Bb trill key

Intonation issues

- G3 – add low Eb key to lower pitch
- Eb – add 5 and Bb key (add 4 for soft diminuendo)
- E3 – add pancake key to raise pitch
- F3 – add 6 to raise pitch
- All notes are sharp (player is not too tight) – get a longer vocal

Muffling

- Certain keys below the first open hole can muffle the tone for soft passages.
- Most common is low F# - W 123 456 F/F# (front and back), pancake

Venting

- Helps if certain notes are cracking (A, Bb, B, C)

Half-hole

- Must use on any note in second octave with a G (Gb, G, G#)
- Must have whisper key down



ISSUES FACING THE YOUNG BASSOONIST

SIMPLE REED CORRECTIONS

Yes, you too can make simple and easy corrections to your students' reeds. If you have pliers with wire cutters, reed clippers or scissors and sand paper, you can do most reed corrections quickly and easily.

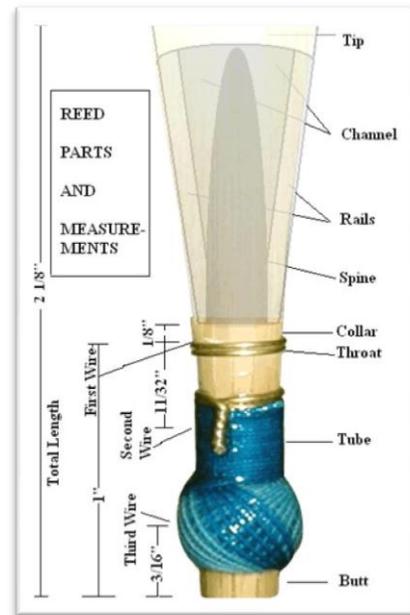
-The first wire (closest to the tip) controls the tip opening. If the reed opening is too open, squeeze the top and bottom of wires with pliers. If the reed opening is too closed, squeeze the first wire at the sides

-When the reed is getting old (E3 will be quite flat) pull the wire ends then tighten.

-When the first wire slips down to the second wire, slide it back into the grooves, then tighten the wire. Wires need to be snug, but not so much as to put an indentation in the cane.

-If the reed opening is good but it still won't play, the reed is too hard. Close the tip a little by squeezing the top and bottom of the first wire with pliers.

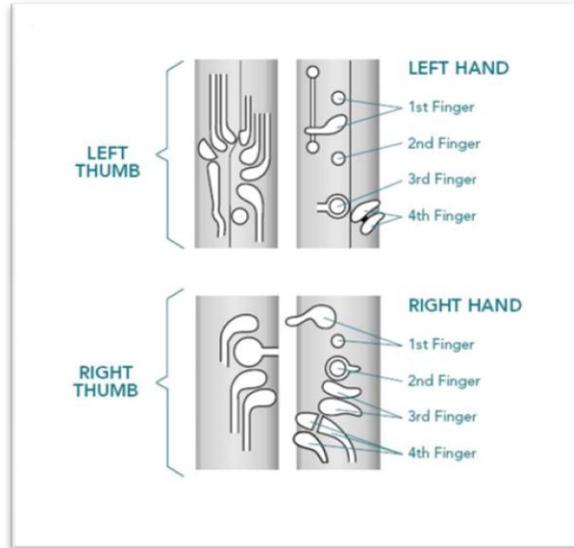
-If E3 falls (sounds more like an Eb), the reed is too soft. Squeeze the first wire at the sides with pliers.



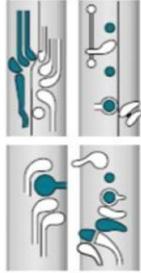
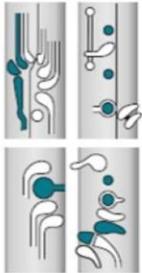
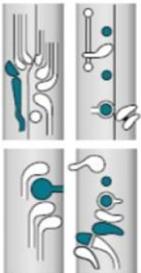
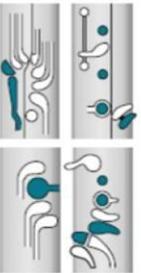
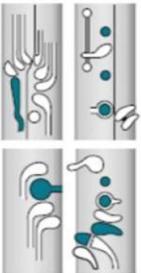
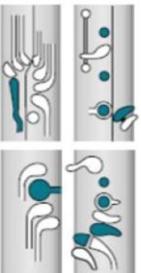
-Commercial Reeds: Look for one with a tip opening that "smiles at you" (is open). The center of the opening should be the widest. When you squeeze the blades closed with your thumb and index finger, the center should close last (if not, the blades aren't balanced and you shouldn't buy that reed). The first wire should be an oval and the second should be more round, otherwise the reed is too hard if the first wire is too rounded. Don't purchase a reed with loose wires (dry reeds will be a little loose) **ESPECIALLY** if the Turks Head (thread wrapping) is loose. Go with a medium strength reed if you are unsure of how they play. Get reeds that are soft enough to blow freely, but hard enough to produce a rich tone.

BASSOON FINGERING CHART

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B \flat 1-E \flat 2

B \flat	B	C	C \sharp - D \flat	D	E \flat - D \sharp
					
					

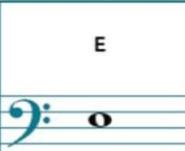
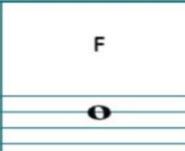
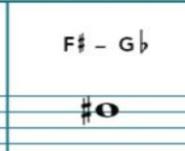
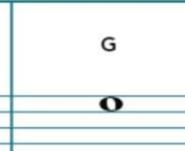
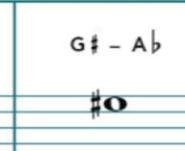
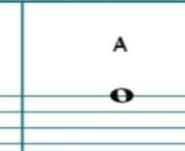
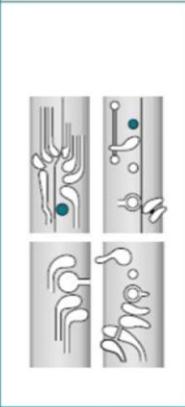
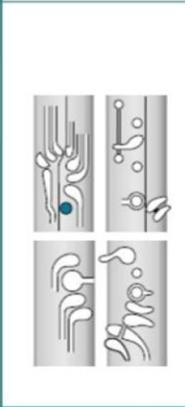
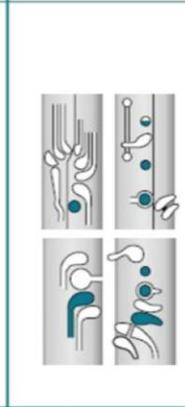
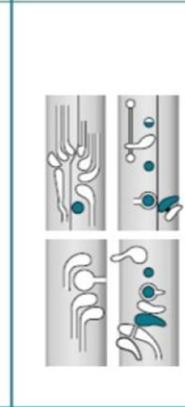
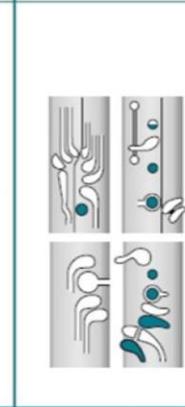
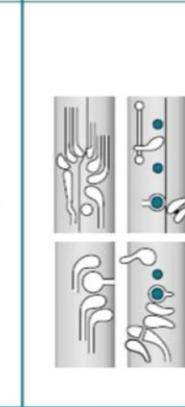
E2-A2

E	F	F# - Gb	G	G# - Ab	A

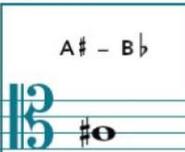
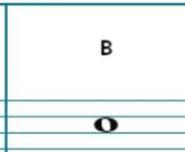
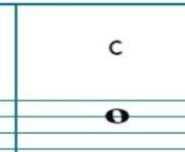
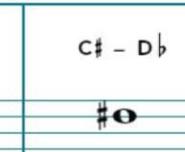
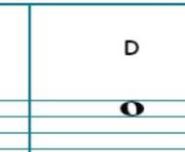
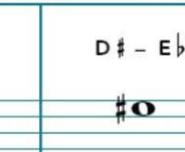
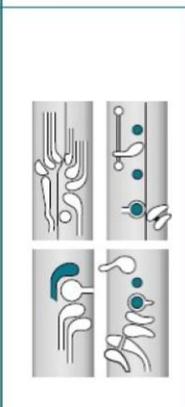
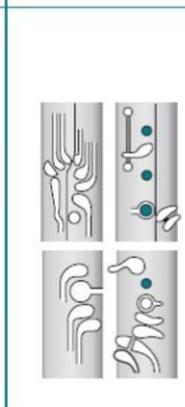
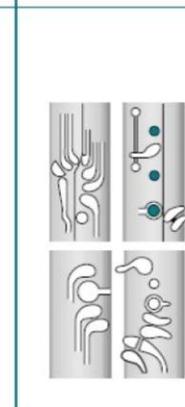
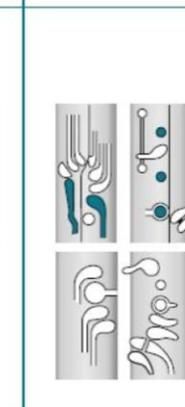
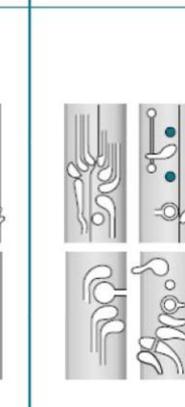
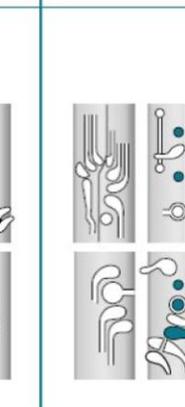
Bb2-Eb3

A# - Bb	B	C	C# - Db	D	D# - Eb

E3-A3

E	F	F# - Gb	G	G# - Ab	A
					
					

Bb3-Eb4

A# - Bb	B	C	C# - Db	D	D# - Eb
					
					

E4-A4

E	F	F# - Gb	G	G# - Ab	A

Bb4-Eb5

A# - Bb	B	C	C# - Db	D	D# - Eb

ES-F5

E	F	F# - Gb	F# - Gb	G# - Ab	G# - Ab

= alternate fingerings

D# - Eb	C# - Db	F# - Gb	F# - Gb	D# - Eb	E

= alternate fingerings

PITCH TENDENCY

S - Slightly, M - Moderately, V - Very

The image shows two staves of musical notation in bass clef with a common time signature (C). The first staff contains ten measures of music. Above each measure is a label: S#, S#, S#, S#, S#, S#, S#, V#, M#, S#. The notes are: G2, F2, E2, D2, C2, B1, A1, G1, F1, E1. The second staff contains six measures of music. Above each measure is a label: S♭, S♭, M#, V#, S♭, S#, S♭. The notes are: G2, F2, E2, D2, C2, B1, A1, G1, F1, E1.



RESOURCES

Valuable resources for you and your students

#1 resource for the non-bassoonist: A TRAINED BASSOONIST! Get someone you may know to assist you or come out to do a bassoon clinic. This has been a very positive experience for me (many may do it for free if they get some private lesson students out of it).

Reeds:

Best source: A professional bassoonist to make reeds for you. If you don't have a pro in your area, you can also look online for hand-made reeds. If you must, you can purchase good commercial reeds like Leshner and Emerald. Forrests tend to be very heavy and require adjustment before use. I have also found Jones to be a fairly good store-bought reed for a reasonable price.

Handmade sources:

Vigder's Bassoon Supplies – www.vigderreeds.com, CA, 4 wks, \$15-17.

Charles Double Reed Co. – www.charlesmusic.com, NH, 5-10 days, \$16-22.

Commercially made reeds:

Frederic H. Weiner – shop.weinermusic.com, allows you to compare multiple commercial reeds

Woodwind/Brasswind – www.wwbw.com, not much variety, but very low cost.

Jones Double Reed Products – www.jonesdoublereed.com

Emerald Reed Company – www.emeraldreed.com

Marlin Leshner Reeds – www.marlinlesher.com

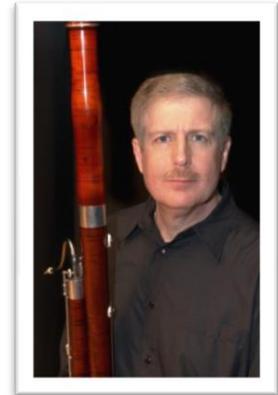
Ebay – www.ebay.com



BIBLIOGRAPHY

-Thank you to Amy Wenhoff for allowing me to photograph you for this project!
I know you get a lot of requests from the ABC family ☺

-Much of the material in this project came from David Rachor, the bassoon clinician for ABC 2010. His many materials and wonderful clinics are the source of this project. David Rachor teaches bassoon at the University of Northern Iowa.



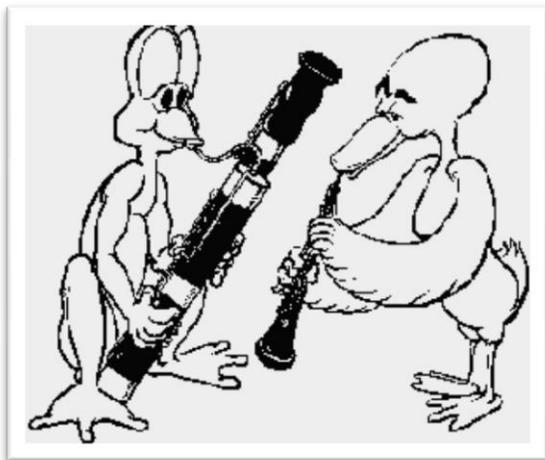
David Rachor

-Embouchure issues and the enclosed CD are from the EMBOU-SURE guide book provided in the ABC Study Set.

-The bassoon part diagram (p. 6) and Fingering Chart are from the Fox Products Corporation's publication entitled "Let's Play Bassoon" by Hugo Fox. www.foxproducts.com

-All musical examples were created in Finale 2004 and converted to pdf.

-Websites for photographs include: pribek.net, bamusic.org, pdqbach.com, davewells.us, foxproducts.com, bsomusic.org, bassoonzone.blogspot.com, vsl.co.at, ndmusic.co.uk, cartoonstock.com, jazzeddie.f2s.com, bassoon.org, bandworld.org, th08.deviantart.net, class.uidaho.edu, thomann.de, sleevereed.com, tasset.com, britanniareeds.com, reedexpertise.com, bassoonjedi.files.wordpress.com, greenjacker.files.wordpress.com, personal.umich.edu



ABOUT THE AUTHOR

Brian L. Balch has just completed his first summer at the American Band College. He is currently in his third year teaching at Big Rapids High School in Michigan. He conducts the two high school bands along with 5th and 6th grade beginning woodwinds as well as a chamber ensemble program, marching band, and pep band. In Balch's first years in Big Rapids, the program has received excellent ratings at District and State Concert Festivals and the Chamber Percussion Ensemble was selected to perform for the prestigious Michigan Youth Arts Festival as the top Percussion Ensemble in the entire state.

Balch also taught two years in Hastings, Michigan, and did his student teaching at East Kentwood High School under James Ross, Co-Director of Bands. He attended Grand Valley State University in Allendale, Michigan, where he received his Bachelor of Music Education in December 2005. He marched three summers in the Cavaliers Drum & Bugle Corps from Rosemont, Illinois, which served as a foundation for his educational philosophies. Balch has taught numerous marching and indoor programs including the NorthCoast Academy Indoor Drumline, the Marion Cadets Drum & Bugle Corps from Marion, Ohio, and high school and middle school programs in West Michigan including East Kentwood, Jenison, Hudsonville, Grandville, Godwin Heights, Forest Hills Eastern, Byron Center, Allegan and Wayland.

Balch currently resides in Big Rapids with his wife Kathy, daughter Emily and cat Nicky.

