

The Four Bassoon Fundamentals

This is an introduction to what is most important to sounding good on a wind instrument—using the wind!

I talk a lot about “fundamentals,” these are just the different physical processes that we manipulate to create sound on the instrument. I divide these into four basic skills:

- The Breath
- The Abdominal Support
- The Voicing
- The Embouchure

These elements are used in every aspect of playing the instrument. Time invested developing control over these will yield great improvements in everything you play. Because of this, I teach my students to begin every day with dedicated time for these in the form of a **Daily Routine**. (For the full Daily Routine, see the section by that name)

The Breath- consists of two parts: an exhale and an inhale.

The exhale should empty all of the old air from your lungs, and simultaneously release tension in your body—relax!

The inhale should completely fill your lungs, with the air cueing your abdominal engagement as it reaches the bottom of your lungs.

A good inhale can happen either slowly or quickly, depending on the character of the music and how much time there is to breathe.

A good fast inhale has a sound that naturally diminuendos—this means that your lungs are actually full and the inhalation wasn't prematurely stopped.

The Abdominal Support- your abs are the muscles that control how the air moves into the instrument

Try pushing in on your stomach with your right hand while you play the bassoon with your left, can you push against your hand with your abs?

Can you feel your obliques and lower back muscles too? All three areas work together to support the airstream.

The *volume* (or amount) of air moved through the instrument determines your dynamic volume. The speed of that air determines tone quality. That is why it is so easy to have a full tone at a loud dynamic, moving a large volume of air through a tiny aperture like a bassoon reed automatically creates a fast airstream.

It is much harder to have a fast airstream at a soft dynamic, this is where the abdominals come into play. By engaging them outward you can increase the air speed and improve the tone quality at all dynamic levels.

The Voicing- like putting your thumb over a hose, the position of your throat and tongue shape how fast the air moves through them—**and** affects your pitch and resonance!

Put one hand on your throat and yawn, can you feel it open and relax? Try playing a low note with that position.

Can you sing middle C above the staff? Try playing that note with the same voicing as when you sang it.

If you play a note with the same position in your oral cavity as if you were singing it, it will naturally be more in tune, with a fuller sound.

This is true even for notes outside of your range! Pretend to sing a low C, feel how ridiculously open you would have to be to sing that note. Now play it with that same position.

Another aspect of the voicing is your vowel shape. Sing a progression of uh-oh-ah-ay-ee on a single pitch. As you move to higher syllables, your tongue moves higher in your mouth, the higher your tongue is, the smaller (and sharper) your oral cavity is, and the faster your airstream tends to move over it. Generally, the higher you play on the instrument, the higher your voicing should be.

Vowel shape also affects tone color, using a lower syllable will flatten and darken the sound. Increase the abdominal support to raise the pitch while keeping the darker sound.

The Embouchure- your lips affect how the reed vibrates!

The reed is the real instrument, your bassoon is just a very expensive amplification device. Because of this, the reed deserves great care and attention independent of your practice time!

The lips should add supporting pressure to the reed from all sides evenly, the goal is to cushion and support it without choking off vibrations

This is easy to do on the top and bottom but hard to do on the sides

So focus on the sides! Bring in the corners like you're saying "ooh"

How far to roll your lips in or out depends on how big your lips are, what range of the instrument you're playing, and on the reed itself, be flexible!

How much reed you take in your mouth also affects the way it responds on the instrument. We should be flexible in this regard, have a "standard depth," but be willing to slide in or out to suit your range.

Generally, low notes respond better with less reed in your mouth (making the instrument slightly longer) and high notes respond better with more reed in your mouth (making the instrument slightly shorter).

Daily Routine

This routine should be completed in the key of the day or week, at three tempos: a slow, a medium, and a fast. The slow tempo should be 40 beats per minute, the fast tempo should be the fastest speed at which the full-range scales can be played smoothly and reliably. Place the medium tempo between the other two to act as a bridge. 40-50-60 is a good starting place until all keys can be played well: one goal of this routine is to equalize your proficiency in each key.

This routine is built around beginning with the long tone and framing other playing exercises around it. It should be acknowledged that the long tone (done well) is the most challenging exercise in this set, especially if you're not yet warmed up. Especially if this is the first playing you're doing that day, make sure you're adequately warmed up. You could warmup with your Weait or Milde scale exercises or circular scales.

Just as in regular practice, you should take breaks and take care of your body during your daily routine. In between each exercise, or if you begin to feel tension creeping into your playing, put the bassoon down, stand up, and do a few stretches. Close your eyes and take a few deep, conscious breaths. Then return to your practice reenergized!

1. The Long Tone

This is the most fundamental act of playing a wind instrument—and what all other playing should be derived from!

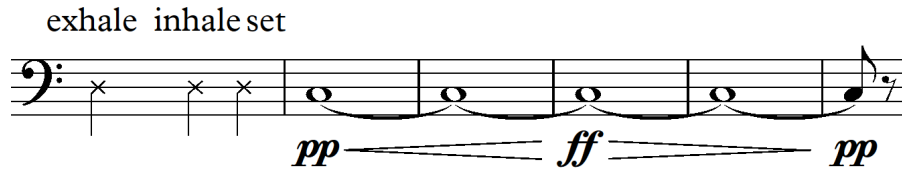
The goal is to develop control of the air stream and support systems by engaging the abdominal muscles and releasing tension in other parts of the body. Begin by establishing the habit of giving a full measure to prepare the sound, taking two beats to slowly exhale and release tension, one beat to inhale *a full dynamic breath that leads to a relaxed throat and engaged abdominals*. The tongue should be placed on the reed and the air stream engaged, then gently release the tongue on beat one to begin the sound.

At slow tempos, work to have distinct steps to preparing the sound: exhale, inhale, set, release. At faster tempos try to make it a fluid gesture that can be executed and relied upon in any musical context.

If you cannot sustain the pitch for 16 beats at 40 beats per minute:

- Practice controlling your rate of crescendo and diminuendo so that you're not expending more air than necessary
- Start at the fortissimo dynamic and diminuendo as slowly and evenly as possible, sustaining at your softest dynamic until you run out of air
- You can increase the tempo to 50 and try to lower it back to 40 over time as your control increases
- Some notes in the bottom octave might never be possible to sustain over 16 beats. In this case, practice breathing *after* the culmination of the crescendo to reinforce musical habits in your daily routine practice.

Mentally count 1-2-3-4-5-6-7-8-9-8-7-6-5-4-3-2-1, tying the counts to the dynamics. Make a perfectly even rate of change your goal. Repeat in all octaves.



1A. Long Tone Variations

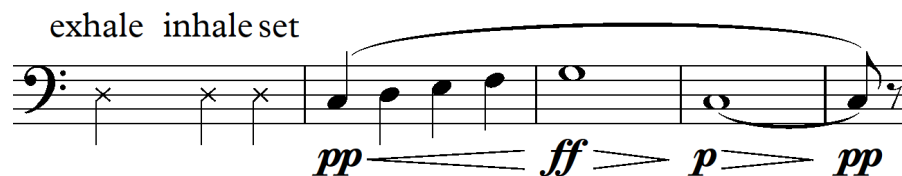
Building on the fundamental long tone exercise, practice these variations on it, striving to keep your support and control just as refined:

- Add layers of articulation: quarters, eighths, triplets, sixteenths in both legato and staccato articulations
- Add vibrato that begins slowly, accelerates, then slows with your dynamics
- Begin at your maximum dynamic, soften over eight counts, then crescendo back to your max
- Begin loud or soft and stretch your taper over all sixteen counts

2. The Tonic-Dominant Drill

Building on the skills developed on the long tone, this exercise adds a layer of slow note changes. Strive to keep the airstream and support systems exactly as they were in the long tone: finger movement does not affect them! Crescendo evenly to scale degree 5, then diminuendo over four beats as softly as possible to still make the slur back to scale degree 1.

Work with a visual tuner and/or a drone to hold all notes in tune at all dynamics and work for a steady rate of crescendo and diminuendo. Alternatively, a drone may be used to reinforce aural tuning and the placement of each note in the context of a key. Repeat in all octaves.



3. Five-Note Scale

Here we begin scale work, starting from five-note and nine-note scales before attempting the full-range scale. Breaking the full-range scale into smaller segments practiced at different tempos in each octave separately gives us the opportunity to improve it in segments before combining them into the full scale. Additionally, the inevitable difficulty of adding articulation is much easier to practice in smaller segments.

In these scales we are adding a layer to our fundamental long tone of changing notes, the fundamental aspect of what we are doing doesn't change, same as when articulation is added. *The added layers of note-changing and articulation do not affect the air stream.*

Work with a drone to hear all notes in the context of a key, creating a phrase up to scale degree five and back down to scale degree one. Repeat in all octaves.

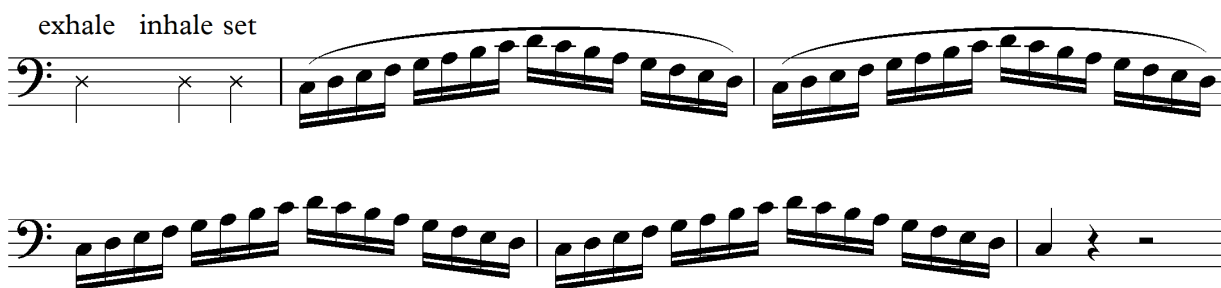
exhale inhale set



4. Nine-Note Scale

This builds on the concept of the five-note scale. Show clear phrasing to the top of the scale and back down, making sure that the articulated version is as smooth as the slurred version.

Work with a drone to hear all notes in the context of a key, creating a phrase up to scale degree nine and back down to scale degree one. Repeat in all octaves.



5. Full-Range Scale

As above, play first slurred and then articulated. Play from the lowest tonic note to the highest comfortable note, then back down to the lowest type of B1 in the key and then back up to tonic. The goal range will go from tonic up to the highest type of E5 in the key, down to the lowest B1 and back up to tonic.

If you're not yet playing your scales full range, this exercise can be substituted for regular scales of 2 or 3 octaves—OR you can play "your" full-range scale: ascending to your highest note in that key, then down to your lowest before returning to tonic.



6. Scale in Thirds

This should receive the same treatment as the regular scale. Separate into individual octaves and then put them together for the full two or three octave scale. Because of the skips, scales in thirds tend to disrupt the airstream more than regular scales. Try comparing segments of the scale in thirds to the regular scale to check for evenness. A slower tempo with great control and accuracy is always preferable to a sloppy, fast scale.

7. Minor Scales

Repeat exercises 2-6 in the parallel minor key for both harmonic and melodic forms. Exercise 3 doesn't change from harmonic to melodic so it only needs to be practiced once in the minor mode.

A good way to work on improving minor scales is to drill the five-note scale first as it doesn't change from the harmonic and melodic modes. Once that is solid, practice from scale degree five up to tonic in each form of minor.

The melodic minor is derived from the way scales typically appear in melodic contexts: the raised 6 and 7 during the ascending scale naturally lead upwards to tonic, while the lowered 6 and 7 during the descending scale naturally lead down to the dominant. Similarly, the harmonic minor scale is derived from how the notes might appear in harmony, scale degree seven must be raised to make the V chord major so that it functions to lead to i. Scale degree six remains lowered for its function in ii°, iv, and VI.

8. Arpeggios

I finish the daily routine with arpeggios in the key of the day. As you add layers to a long tone it gets more difficult to focus on the airstream, scales are more difficult than one tone, articulation and vibrato also complicate matters. Because of their skips, arpeggios tend to disrupt the airstream more than scales, so I put them at the end of the routine once I've hopefully gotten everything else going well.

In the key of the day, I play:

Major triad, minor triad, then major seven, dominant seven, minor seven, half-diminished, fully-diminished. For a complete version of this sequence, see the **Harmonic Progression** handout.

Other Thoughts...

As has been stated, the primary goal of the daily routine is to develop independence of airstream and support from the fingers, tongue, and vibrato. Think of these as layers that are added to the fundamental airstream; *they aren't actually a different exercise*. As you add these layers to the long-tone make sure that you maintain the same level of support.

Ideally, everyone should complete the above exercises at three tempos: 40 bpm and your personal medium and fast tempos. But this isn't always possible due to time constraints. The daily routine works best when it is performed *daily*, even if there isn't time to complete all aspects of it.

To truncate the routine, the fast tempo can be omitted depending on time constraints—the primary benefits are derived from the slower tempos. Exercises 1 and 2 are especially beneficial in the slow tempo, spending more time on them at that speed is better than less time at faster tempos. If you only have a few minutes to devote to a daily routine, spend them on exercises one and two.