

CIRCULAR BREATHING TUTORIAL

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CIRCULAR BREATHING

Breathe air into your lungs through your nose. At the exact same time, squeeze air out through your mouth that you stored in your cheeks. Then without a break, exhale air from your lungs again. This is the coordination trick known as circular breathing that creates a continuous air stream out of your mouth. Circular breathing allows the sound of the didjiridu to flow a very long time without interruption.... even hours at a time.

First, the steps to learn to circular breathe are presented here in outline form. Then, the process is described in more detail, pointing out potential pitfalls along the way. Learning to circular breathe is much like learning to ride a bike. Once you learn to coordinate the muscles in the proper way, it becomes second nature, and you won't forget how. So let's get started. First, the outline...

CIRCULAR BREATHING - OUTLINE

- circular breathing creates a constant exhalation through the mouth. The cycle is as follows:

Air coming from the lungs is exhaled. Just before the lungs need refilling, the cheeks puff out. The air stored in the puffed out cheeks is squeezed out and at the same time, the nose inhales air to the lungs. Before the stored cheek air is depleted, the newly refilled lungs exhale. The cycle repeats, and a constant exhalation out the mouth is created.

- The first step in learning to circular breathe is to learn to expel stored cheek air at the same time as you breathe air into your lungs through your nose. The following steps will make this happen.

First, fill your mouth with water so that your cheeks are bulging. Do not swallow any of it at any time. Breathe in and out through your nose while you hold the water in your mouth. Once you get used to the rhythm of your breath, squeeze your cheeks with your hand while you breathe in. This expels the water out of your mouth at the same time that you are breathing air in. Repeat this, but now do it without using your hands. Next replace the water with air. Work on this isolated exercise until it becomes second nature, and you can do it instantly without having to think about it.

- Put this newly learned isolated exercise into a smooth cycle of: exhaling from the lungs, doing the isolated exercise, exhaling from the lungs, doing the isolated exercise, etc. Relax when making the transition from our isolated exercise to exhaling from the lungs. Trying to "make" it happen only tightens muscles, and that stops the air flow. To see if you truly have non-stop exhalation, put your hand in front of your mouth and feel your exhalation. The force from the stored cheek air will be far less powerful than the force of air from your lungs. This is natural. Just make sure that the exhalation does not stop.

- Circular breathing on the didjiridu:

It is very common when bringing the circular breathing process to the didj, that the lips will stop vibrating during the cheek squeeze. This is because now the lips need training. Lips require a certain amount of air pressure to keep them vibrating. Since the air pressure drops (but does not stop) during the cheek squeeze portion of the circular breathing process, if your lips are not flexible enough to respond to the lower air pressure, they will stop vibrating. The solution is simply to play more, which gains lip flexibility... as long as you do not force the lips. Your lips should feel more loose after playing, not tighter. Think "train without strain". There is more on this step below, but remember that playing a little every day is better than playing a lot occasionally. Circular breathing will then get better and better.

CIRCULAR BREATHING - DETAILED

I'm going to take you through a few simple exercises that will isolate, and then coordinate the proper muscles, thus quickly establishing the proper "feel" of circular breathing.

This first exercise can be done in the shower. First, fill your entire mouth cavity (including your puffed out cheeks) with water. Now blow the water through an opening in the center of your lips, but do not swallow. What you have done is separate your mouth cavity from your throat and nasal passages. This allows the nose to fill the lungs with air without any assistance by the mouth. To prove this, repeat the "water-out-the-mouth" exercise, but this time, breathe in and out through your nose while you are expelling the water. Next, isolate the coordination of expelling the water, but only while breathing air in the nose. If this is difficult, hold the water in your cheeks while you breathe in and out through your nose. Continue this, but now, as you breathe in, also squeeze your cheeks together with your hand, thus forcing the water out your mouth. Stop. Then repeat. Once your muscles learn the feel of simultaneously breathing in through your nose and squeezing stored air (or water for now) out of the mouth, you won't need to use your hand anymore to squeeze out the air.

Now repeat this isolated exercise, but this time instead of filling your mouth with water, fill it with air. (If you imagine that you are expelling water rather than air, there is less tendency to reverse the progress you have made thus far.) The first thing you should notice is that your mouth gets rid of the air much faster than it gets rid of the water. In fact, you will probably be out of stored mouth air before you can completely fill your lungs with "nose air". If you go back to the water exercise, you can make the flow of the water last long enough to fill the lungs with air several times.

You started with water because it forces the proper muscles to be engaged at the proper time and water teaches you how these muscles feel when properly engaged. Water also lets you experience, from the start, a steady stream expelled out the mouth that lasts long enough for the nose to sufficiently fill the lungs with air.

Now you must practice the isolated exercise of squeezing out cheek-stored air while simultaneously breathing in through your nose. Do the exercise throughout the day when you have a moment to yourself. You can also do this exercise (with water instead of air) every time you shower or bathe. Soon your muscles will learn the feel of coordinating these two movements. Before long, this exercise will require no concentration. The point is to make this isolated action become second nature. You should be able to just do this instantly without thinking about it. You may read on, but go no further with circular breathing attempts until this happens.

Now we have to make the air stored in the mouth last long enough for the nose inhalation to replenish the lungs. There are two things that affect this - 1) how quickly the air stored in the mouth is expelled and 2) how quickly air is inhaled through the nose. Both of these can be controlled. Barring colds and sinus problems, anyone can vary their nose's intake speed from quick sniffs to slow, deep inhalations. However, controlling the speed that the stored mouth air is expelled out the mouth cavity may not come so immediately. This is part of the reason why, in the beginning, quick breaths in through the nose are usually required to make the circular breathing cycle happen. Eventually the stored mouth air can be used efficiently enough that slow, deep inhalations through the nose are normal.

So let's work on our mouth air efficiency. First of all, the amount of air we can store in our cheeks is pretty much fixed. We have to make maximum use of this amount. One way is by slowing down how fast the stored air is expelled through the lips. To demonstrate, fill your cheeks with water and as you expel it, make it last as long as you can while maintaining a continuous flow. Now, do it again, but this time, expel the water as quickly as you can. You can instinctively control the flow. Now do the same thing, but using stored air rather than stored water.

When you squeeze air out of your cheeks while breathing in your nose, the strength of the exhalation is far less powerful than when the exhalation comes from your lungs. This is natural. If we exhaled stored cheek air with same force that we can produce from the lungs, then we would use up all the stored cheek air faster than we could inhale through the nose. This is why we slow down the speed of exhalation while squeezing out stored cheek air.... so it can last long enough to inhale fresh air through the nose.

THE WHOLE CIRCULAR BREATHING CYCLE - PUTTING IT ALL TOGETHER

Now that we learned the isolated action of exhaling stored cheek air while simultaneously inhaling through the nose, it is time to incorporate this into a continuous cycle. To start the circular breathing cycle, first fill the lungs, then exhale normally out the mouth only. Just before the lungs need refilling, puff the cheeks out, filling them with air. Continue to exhale out the mouth while doing this. Expel (squeeze out) the air stored in the mouth while the nose brings fresh air to the lungs. (This is the isolated exercise from above.) When the stored mouth air is nearly depleted, exhale the newly inhaled lung air. This transition must not break the continuous flow of air out the mouth. The steps in this paragraph are a loop - simply repeat this paragraph over and over. This is the circular breathing cycle.

If exhalation stops in the transition from one part of the cycle to the other, the first thing to check for is the "Valsalva Effect". This is the engagement of muscles that block off the exhalation of air. To activate them is easy - imitate forcing a bowel movement or lifting an extremely heavy object. When you strain this way, you engage muscles that also stop your exhalation. This may only last a split second before you adjust and resume exhalation, but if it happens at all, the circular breathing cycle is lost. The answer is simply.... relax. Another possible cause of not maintaining exhalation during the transition from squeezing out stored mouth air to exhaling lung air, is trying to expel more mouth air than you have stored. One way around this is to take smaller and quicker nose inhalations (at least for now). You do not have to completely refill the lungs in one inhalation. If one inhalation does not completely supply the lungs, a series of quicker nose inhalations should work.

Now that our circular breathing is smooth and consistent, we need to apply it to playing a didjiridu. First make sure you are properly warmed up by consistently producing a good tone on the bottom pitch of the instrument. (If your lips are slow to respond, remember the section on basic sound production.) Once your lips freely vibrate, try circular breathing while playing.

There is a problem that typically occurs here which is separate from the circular breathing skills you have developed thus far. There is a very high chance that your lips will stop vibrating when you inhale through your nose. The reason for this is simple - the lips are not yet flexible enough to respond to an efficient air stream. Vibrating lips require two things. First, they need air support, and secondly, they must have enough flexibility so the air can make them vibrate. The more flexible the lips are, the less air that is needed to set them into vibration. Conversely, inflexible or cold lips require a large burst of air to "force" them into vibration, and a relatively large quantity of steady air to keep them going. When the air pressure drops during the cheek squeeze portion of circular breathing, lips will stop vibrating if they are not flexible enough. The solution is simple. You must gain enough flexibility in your lips so that the efficient air stream will keep them buzzing. Lip flexibility is a matter of conditioning. Proper daily practice will condition the lips making them dramatically more responsive with less effort. Regular, daily practice also builds endurance so you can eventually play for hours at a time. At least spend some time every day doing some buzzing exercises. Even buzzing your lips only a few minutes every day is better than a sporadic practice that lasts for hours.

Lip buzzing exercises can be done with the lips only, or incorporate a tuba or trombone mouthpiece. Lip buzzing without a mouthpiece can be beneficial when the lips feel tight, or have been unused for a while. (Try it when you first wake up.) However, like practicing the art of walking while your feet are raised in the air, lip buzzing without a mouthpiece "wakes up" the muscles, but does not offer the required resistance to train them to do the desired activity.

Buzzing with a tuba or trombone mouthpiece does offer sufficient backpressure or resistance, and more closely resembles the feel of playing a didjiridu. Brass instrument players have long known the benefits of buzzing on the mouthpiece. It is used as a warm-up before playing the full instrument, and as a portable tool to help keep the lips in shape when you cannot take the full instrument with you. Also, as we have seen in the section on Mouth Cavity Manipulation, mouthpiece exercises also develop better embouchure flexibility.

Once the lips are properly conditioned, the stored mouth air can be used efficiently enough so the nose may take in a deep, full breath. Until then, quicker breaths through the nose are required to maintain the cycle. This will mean taking only very quick sniffs of air in the beginning and gradually increasing the air intake as your lips become more efficient. Eventually, lots of air can be taken in quickly, or a small amount of air may be taken in slowly. When you reach full efficiency, you can choose any way in between. Usually what you are playing will dictate the tempo and rhythm of your nose breath.

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