Redbird Flutes

Guide to Playing The Native American Style Flute

By Roger R. Bennett

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Welcome to the Native Flute! I hope you will find playing this remarkable instrument as pleasurable as I have, and that it will bring you many hours of enjoyment.

About Redbird Flutes:

Redbird Flutes came into being as a result of my addiction to the Native American Flute and the high prices charged by most commercial flutemakers. I constantly wanted more flutes in different keys, and as I'm not independently wealthy, I decided to learn to build my own. After some instruction and experimentation, I learned to make flutes; and when they began to sound as good (or better) than some of the higher-priced flutes I had purchased, I realized that *more expensive* doesn't necessarily mean *better.*

I resolved to offer a quality instrument at a very reasonable price. I do this because I love the Native American Flute and I want others to be able to affordably enjoy this almost magical musical instrument. I use good woods; I tune using a high precision computerized tuning program, and I care about my work – I won't sell an instrument I wouldn't be willing to buy myself.

Origins of The Native American Style Flute

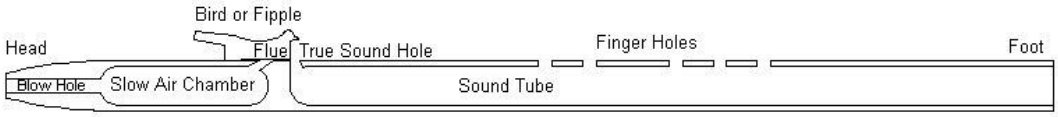
Although it is impossible to know just how far back into antiquity the Native American Flute goes, we know that it has been around for a very long time. Bone whistles (the forerunner of the modern NAF) dating back to around 300 B.C. have been found in northern Arizona, and a type of end-blown flute commonly called Anasazi flutes

dating back to around 650 A.D. in northern New Mexico. While these flutes differed greatly from the modern NAF (Native American Flute), they indicate that flutes have long been a part of Native American cultures. The modern NAF is the end product of generations of the evolution of Native American Flutes.

The NAF can be divided into different types, depending on the different native cultures which made them and the materials they were made from. Some were made from clay, some wood, some reed and some of river cane, which is quite similar to bamboo. What today is most often thought of when one speaks of a Native American Flute is a Western Plains style wooden flute, also known as a love flute or courting flute. These flutes were often used by the young men of the Plains peoples to win the heart of that special young lady, hence the name. However, the courting flutes are just one of many types of Native American Flutes. However, whether they are 5-hole or 6-hole flutes, they essentially play the same, with some very minor differences.

Anatomy of the Native American Flute

Before we begin to describe how to play the flute, let us first understand how a NAF is constructed. If we understand the parts of a flute and how it operates, we find ourselves better in tune with our instrument.



The NAF is a unique two-chambered instrument. In technical terms, it is classified as an end-blown flageolet. However, its' haunting sound and two-chambered design makes it unique in the entire world.

Air enters the flute from the blowhole in the head of the flute. It is captured in the SAC, or Slow Air Chamber; it exits via the exit hole into the flue, which is a narrow groove cut either into the body of the flute or into the underside of the fipple or bird. The flue directs the air stream precisely across the TSH, or True Sound Hole. The wedge shape to the TSH's cutting edge splits the air stream, creating the sound. The pitch of the sound, or note, is determined by the acoustic length of the sound tube, or bore. The finger holes effectively lengthen or shorten the acoustic length of the sound tube, creating variations in the sound pitch, or notes.

One of the more modern enhancements to the NAF has been the transition of tuning into Fundamentals, or Keys. Traditional native flutes were not tuned to a specific base note; consequently it was difficult to play two flutes together or with another instrument. By request, flute makers began tuning the fundamental note of a flute (the note produced when all the finger holes are closed) to a specific note. For example, a flute tuned to a fundamental of F will play the note of F with all holes closed; this is also called the Key of the flute. Thus, a flute which plays an F with all holes closed is in the Key of F.

How Native American Style Flutes are made

When the flute maker begins the flute making process, he or she has at their discretion several different methods of hollowing out the inside. We'll take a quick look at several of these.

Split Routering. In this method, the flute is hollowed out using an electric router and half-round bits. This is done by using two pieces of wood which have been pre-marked with the interior shape of the Bore and the Slow Air Chamber. The flute blank is hollowed out by using several cuts, with each successive pass slightly deeper than the previous one. This continues until the desired depth is achieved.

After the flute has been routered, the Air Hole and the True Sound Hole are marked, drilled out, and filed to obtain the shape and angles of the holes. Once this is completed, the flute is sanded, glued and clamped and allowed to cure. Most of the flutes in smaller shops are made this way.

Boring with Gun Drills. In this method, a specialized drill called a Gun Drill is used to bore out the Slow Air Chamber and the Bore from the end of the flute. This method entails more difficulty and requires some rather expensive equipment, but results in a seamless flute. The Air Holes and True Sound Hole are marked, drilled and filed after the flute blank is drilled.

Branch Flutes are made using a fallen tree branch. The branch is split in half, marked, and then hollowed out using a hammer and gouges. The Air Hole and True Sound Hole are then drilled and filed. The branch is then glued back together.

Shaping the exterior. Once the glue has cured, there are a number of methods for shaping the exterior, ranging from simple rasp files and block planes up to wood lathes with shaping routers mounted to round the outside.

Once the outside has been shaped, no matter which method, it is no longer a flute blank. It is now considered to be a flute, but untuned.

Understanding the Tuning of a Native American Style Flute

As this crops up from time to time, I thought it best to explain a few things about how a Native American Style Flute is tuned. When we flute makers tune a flute, we need two things: A tuner (or a tuning program on a computer or other electronic device) AND a thermometer divided into notes and cents between the notes.

A wooden flute will play a bit different at different wood temperatures, and that effects how the flute is tuned. The benchmark temperature is 72 degrees Fahrenheit – at 72 degrees, the note should be exactly on the note. But what happens if it isn't 72 degrees? Well, if it is colder, the notes will be a bit flat, and if it is warmer, the note will be sharper. For every 2 degrees over or under temperature, there is approximately 3 cents difference in how the flute will play.

Over time, flute makers developed a temperature offset chart: a chart that tells you exactly how much the differential actually is. For example, if the temperature is 66 degrees, the note will play about ten cents flat. Cents, by the way, are the little divisions in between the notes. There are about 100 cents between each note, and most tuners will display lines indicating cents, usually in increments of five or 10.

So as we begin tuning, we look at the thermometer to see what the ambient air temperature is. Let's say I'm prepared to tune, and I'm looking at 64 degrees ambient air temperature. I consult my offset chart, and it tells me I need to tune 13 cents flat. And that is exactly what I and every other reputable flute maker does. Following this process results in a flute that will play perfectly with flutes in the same key made by other makers.

I added in this section describing the tuning at temperature because I occasionally get queried that a flute is 'out of tune'. Sometimes it is as I'm not perfect. Most of the time, however, it is because the person is only checking the flute with a tuner with no regard for the temperature. Rest assured, however, that if you get a flute from me and it is genuinely out of tune, I'll either retune it or replace it if retuning isn't an option.

Almost Ready to Play?

We're almost there. In a moment, we'll place flute to lip and make our first sound. But first, there are some basic points we need to cover.

1) Be sure to cover all holes **completely**. If there's even the slightest bit of a hole not sealed, you'll get an ugly squeaking sound. This is **not** how the flute is intended to sound.
2) Don't use your fingertips. Instead, use the meaty bulbous part of the upper finger, about halfway between the last joint and the fingertip. This will better allow you to seal the finger holes and make good, crisp notes.
3) Blow GENTLY into the flute. It does not require a lot of air. It isn't like a trumpet – the Native American Style Flute requires very little air to play.
4) Breathe at normal intervals. If you must gasp for air, you're doing it wrong. Keep in mind that breathing is something which will develop automatically as you become familiar with the flute. Keep in mind that you only need to raise your finger off the hole about 3/8 of an inch. Keeping your fingers close allows you to find the hole more quickly.
5) Play slowly at first. Take your time with each note; get the feel of the flute. Speed of fingering is not important at first; this is also something which will develop automatically as you progress.
6) Close your eyes when you play. This will enable you to develop your fingering skills and coordination more quickly.

7) If you're having trouble sealing all the holes, play in front of a mirror. Watch your fingering – that little bit of uncovered hole that is driving you insane will reveal itself.
8) Don't be afraid to experiment. Play each note singly, learn its full range. Start by blowing softly and then increase the air pressure until it shifts. This is called overblowing; back off on the air pressure to keep the note stable and clear. The most difficult of all the notes to play is the lowest note; it is easiest to overblow. A simple rule of thumb is 'the lower you go, the softer you blow'.
9) Don't forget to have **fun**. The NAF is a very enjoyable instrument which practically plays itself. One does not need to read music notation to play beautiful music on it (but that doesn't mean you can't play sheet music on the NAF). It lends itself well to playing 'by ear'.

Preflighting the flute…

First, make sure that the bird is lined up directly behind and centered on the True Sound Hole, with the leading edge of the bird should just be touching the edge of the True Sound Hole. The bird should be snug against the body of the flute, and you shouldn't be able to easily move it. If it is too loose, tighten the leather ties.

Get a Grip, Man…

Next, take the flute with both hands. The thumbs of both hands should be under the body of the flute. One hand, either left or right, should be used to play the lower three holes; the other hand is used to play the upper two holes. The middle finger of this hand should be placed on the blank spot between the upper and lower holes. This allows you to keep a loose yet secure grip on the flute while playing.

Pucker Up!

Yep, just like you're about to lay a big smooch on someone. Next, lay the head of the flute on top of your lower lip, with the lip under the flute. The flute ***does not*** go into the mouth! The upper lip presses against the head of the flute, with the lip partially sealing the blowhole. Add just enough pressure to seal the lips against the flute.

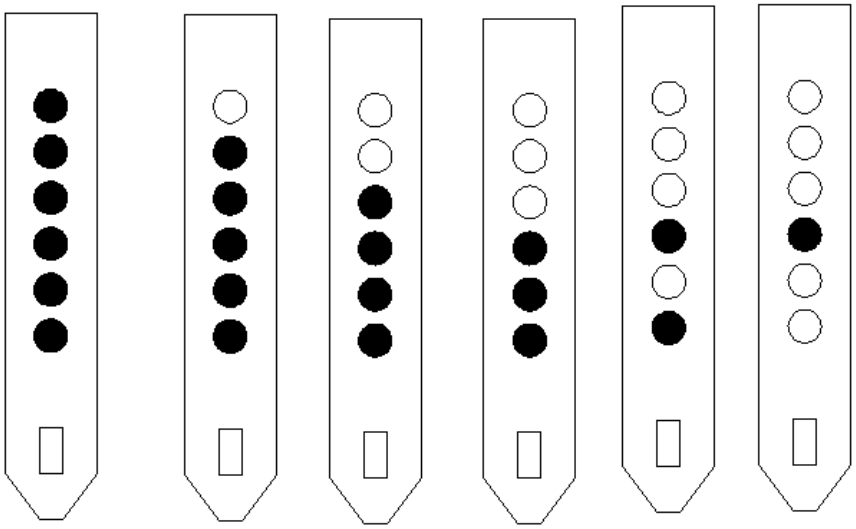
And now, the moment you've been waiting for…

With all the finger holes covered, gently blow into the flute. Of you don't get a sound, increase the air pressure until you hear a note. Keep increasing the pressure until the note shifts sharply higher (overblowing). Back off a bit; hold the air pressure at a level where you get a clear, clean note. This is your fundamental note; the note which defines the Key of your flute.

Scales

The first scale that we shall discuss is the *Minor Pentatonic Scale*, which is a five note (hence Penta, meaning five). Although the flute has six holes, you will not need all six holes to play this scale. Numbering the holes from 1 to 6 starting at the foot of the flute, you will see that Hole 4 (The third hole down from the mouth end) is left covered. It is a special note which you will use later.

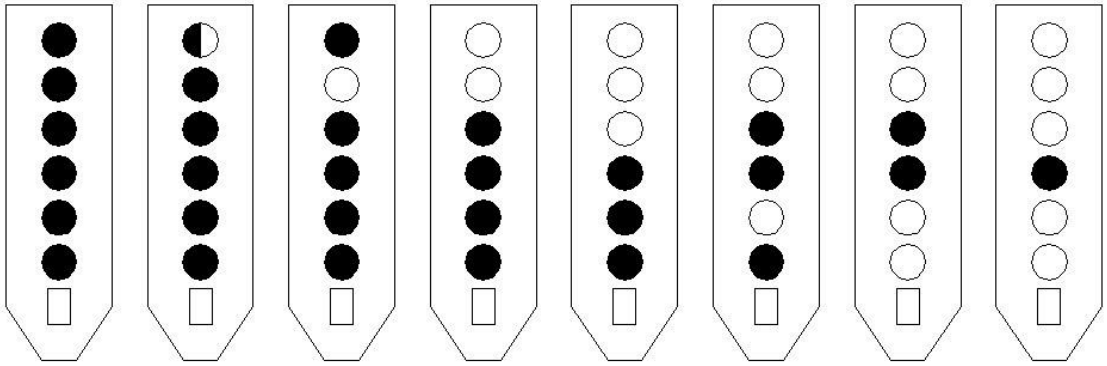
I want you to think of climbing a ladder. As you climb up the rungs of the ladder, you realize that you won't need the rungs you have already climbed until you descend back down the ladder. The same holds true of the flute – as you ascend the scale, you won't need the hole until you come back down, so leave it open. The ONLY hole which stays covered is Hole 4. This is the most common mistake most new players struggle with – remembering to leave the hole open. Just follow the diagram below:



Dark = closed Light = open

Try playing up and down this scale. Get used to the sound of the notes; don't be afraid to experiment. Try doubling or tripling up on notes; or fluttering (rapidly covering and uncovering a hole). Once you're comfortable with this scale, continue with the next paragraph.

Next, let's discuss the *Chromatic Scale.* The Chromatic Scale uses combinations of holes to produce a full range of notes, including the sharps and flats one needs to play more contemporary music. While it is not completely possible to play every single piece of music out there, one can play a wide range of music on the NAF – from jazz to bluegrass and beyond.



Dark = closed Light = open Half = Half-hole covered

Experiment by playing the Chromatic Scale just as you did the Minor Pentatonic Scale. Become familiar with the location and sound of the notes. Once you feel you're comfortable with the Chromatic Scale, we'll discuss some playing techniques and the care of your flute.

Playing Techniques

Tonguing – tonguing is simply cutting off the airflow by tapping the tongue against the top of the mouth or opening in the lips. It's like making a T sound without vocalizing the T. Pucker your lips and blow as if you were whistling (only without sound). Tap your tongue against the roof of your mouth, cutting off the airflow and making a 'tuh-tuh-tuh' sound. Now try it with the flute. Tonguing controls the start and stops of the note and can be used as a form of rhythm. Rapidly for fast pieces, more slowly depending on the mood of the music. Experiment, see what you like.

Fingering – fingering affects the sound of the flute drastically. We've already discussed sealing the holes; now we can discuss sliding a note, which is sliding your finger slowly off and/or on a hole, producing a slow shift in pitch, and half-holing, which as its' name implies is covering only half a hole. Half-holing takes a lot of practice, so be patient and keep trying.

Embouchure – As I said in an earlier section, the end of the flute **does not** go in your mouth. There's a natural tendency to want to do this, but you simply must resist the impulse. Placing the end of the flute in your mouth can create excessive moisture in the slow air chamber, which eventually migrates to the flue and creates problems when playing. This is a condition known as *wetting out.* Embouchuring or placing the flute against the lips helps reduce the moisture created by condensation from the breath. It can even help reduce the condensation problems as the upper lip seals off part of the blowhole.

Wetting Out – if your flute's flue becomes clogged with water, simply place your finger partially over the true sound hole and blow hard, then shake off or wipe off any moisture you blow out. Also, take the foot end of the flute in one hand, and hold it with the head

down towards the ground. Shake the flute and let the water run out of the blowhole. Please use a bit of common sense when doing this; people might get a bit unhappy if you shake your breath water out on that new carpet of theirs. The best place to clear a flute of water would be outdoors or over a bathtub.

Care of the Flute

Cleaning - Your Redbird Flute is finished with several coats of high-gloss polyurethane. The polyurethane is a durable finish which resists scratching, seals out moisture, protecting the wood and preventing it from drying out. Some flutes require oiling, but Redbird Flutes do not. If the flute has become soiled by something, use a damp cloth to remove the substance and allow the flute to dry.

Storage – When you're not playing your flute, you want to store it in a cool, dry place, away from sunshine, heat and humidity. A flute bag is a great thing; you can either make one from some soft cloth, like a felt like blanket material or you can even use an old heavy sock. Or you can opt to buy a nice flute bag; many manufacturers out there make some beautiful flute storage bags from cloth or even leather or deerskin. NEVER leave your flute in a vehicle with the windows rolled up on a hot day. Temperatures can easily exceed over 150 degrees in a hot car, and that can make the glue in the seams fail.

Flute Racks - Some folks want to keep their flute on display where it can be seen. If you decide that this is what you'd like to do, I'd recommend either making or purchasing a wooden flute rack. However, keep in mind that the rack should not be placed in sunlight, near a heat source or in an area where there is high humidity. Keep your flute cool and dry.

TABlature and Sheet Music

The Native Flute can be played without knowing any type of music notation whatsoever. The Native Americans had no system for recording their music; songs were taught by the old to the young and thus passed generation to generation. Only in the modern era have systems for writing down music for the native flute been developed.

The first thing one must realize is that there are two separate ways a native flute can be played. One system is by learning a song on one flute by memory or by using one of several types of music notation; the other is by knowing exactly where the notes are on your flute and being able to read standard music notation.

In the first method, once a song is learned on one native flute, it can be played on any other native flute regardless of what Key the flute is in – the song is now merely played in the Key of the flute. This is possible as the relationship between the finger holes on one flute is the same as the relationship between the finger holes on another. This allows one to play a song on a C flute and then immediately pick up an F or G flute and play the same song with the same fingerings.

There are several specialized systems of music notation that take this special relationship into account. The first, and one that I personally use, is the Flute Icon

system. The FI system uses drawings of a flute with the finger holes either open or closed. By matching the open and closed holes on the fingering chart, a song can be played. Other systems include TABlature, developed by the premier native flute player and recording artist R. Carlos Nakai, and SNAFT (Simplified Native American Flute Tablature).

Nankai's TABlature uses standard musical staves and notation and flute icons to represent the notes of a song. SNAFT uses X and O text to represent open and closed holes. As both systems require a bit of getting used to and the FI system is easier, I recommend it highly.

One thing to keep in mind: I had the genuine privilege of hearing R. Carlos Nakai speak about the Native Flute at a symposium I attended a while back; and during his talk, Carlos spoke about the essential nature of the flute. It is, as he explained, an instrument of personal expression, one that is truly meant to be played from the heart and not one that is meant to play (as he put it) 'music in a box'. So, while it is possible to play preprinted music on the NAF, it is not necessary. Indeed, I seldom play preprinted music, opting instead to figure out songs by ear and then memorizing them by rote.

Although I encourage you to first experiment and play the music you will find within your heart, I have included several songs in Flute Icon format for you to try at the end of this guide. Additionally, I have included a blank FI sheet for you to write down your own songs. This sheet can be reproduced by copying on a copy machine, or scanning and printing.

Resources

There are numerous resources available to Native Flute Players out there. I will list the best of those resources here.

Flute Circles – one of the best things a flute player can do is to join a flute circle. A flute circle is a group of fluties (the unofficial title Native Flute Players give themselves) who meet periodically to share their common interest in the Native Flute. A comprehensive list of flute circles can be found on the web page of the World Flute Society at https://www.worldflutesociety.org/

The World Flute Society website also lists flute instructors, fluting events and Native American Flute related links.

Websites – Here are a few beneficial websites related to the Native American Flute along with a brief description of what can be found there:

Flutetree
http://www.flutetree.com/
Flutetree is Robert Gatliff's excellent website which features the most comprehensive songbooks for the NAF on the Web I've seen.

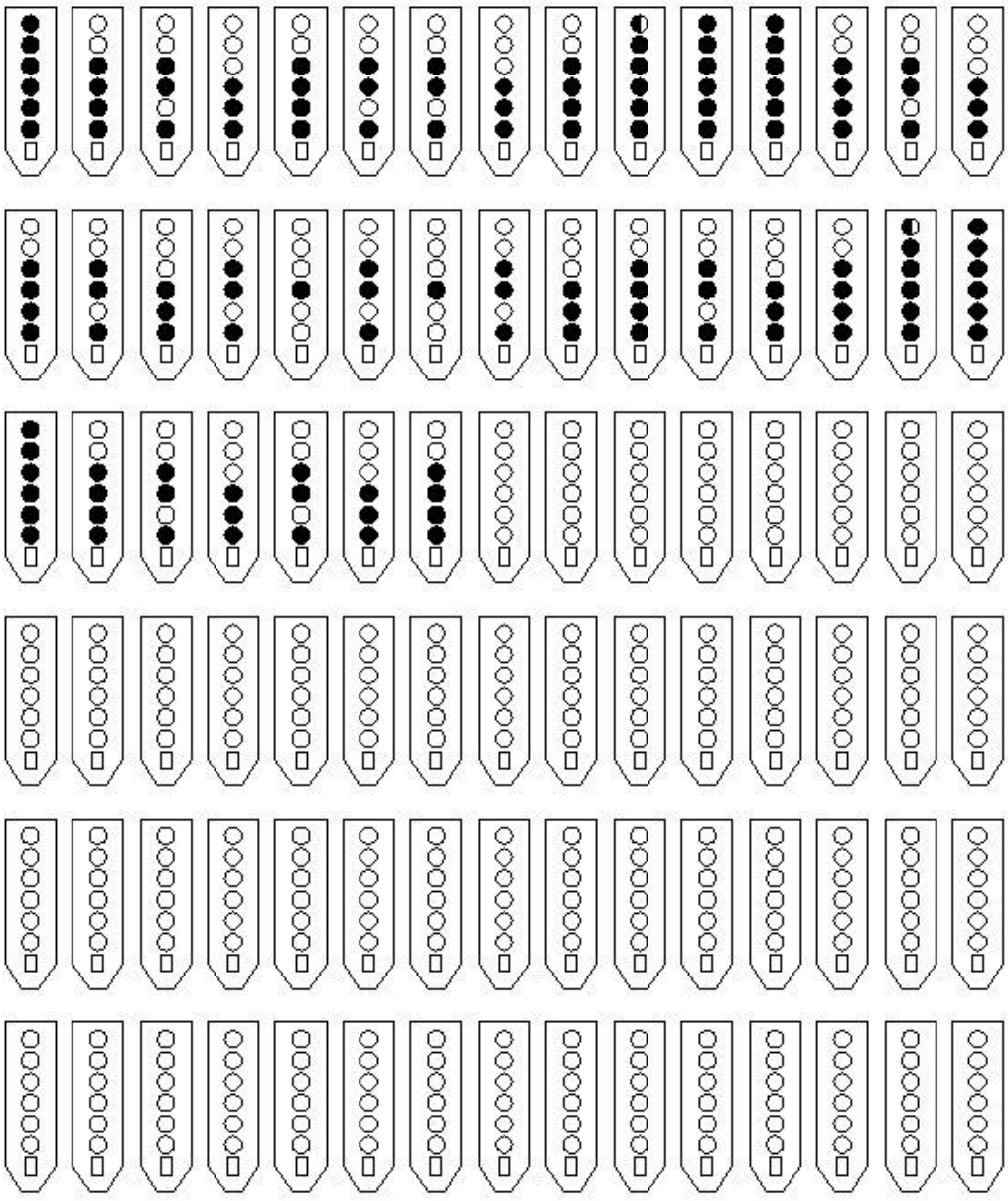
Flutopedia
https://www.flutopedia.com/
Flutopedia is Clint Goss's excellent website with a lot of different information and background on the NAF.

Well, that's about it. I do hope you enjoy the journey with the Native American Flute, and I hope that you have found this guide helpful.

Happy Fluting!

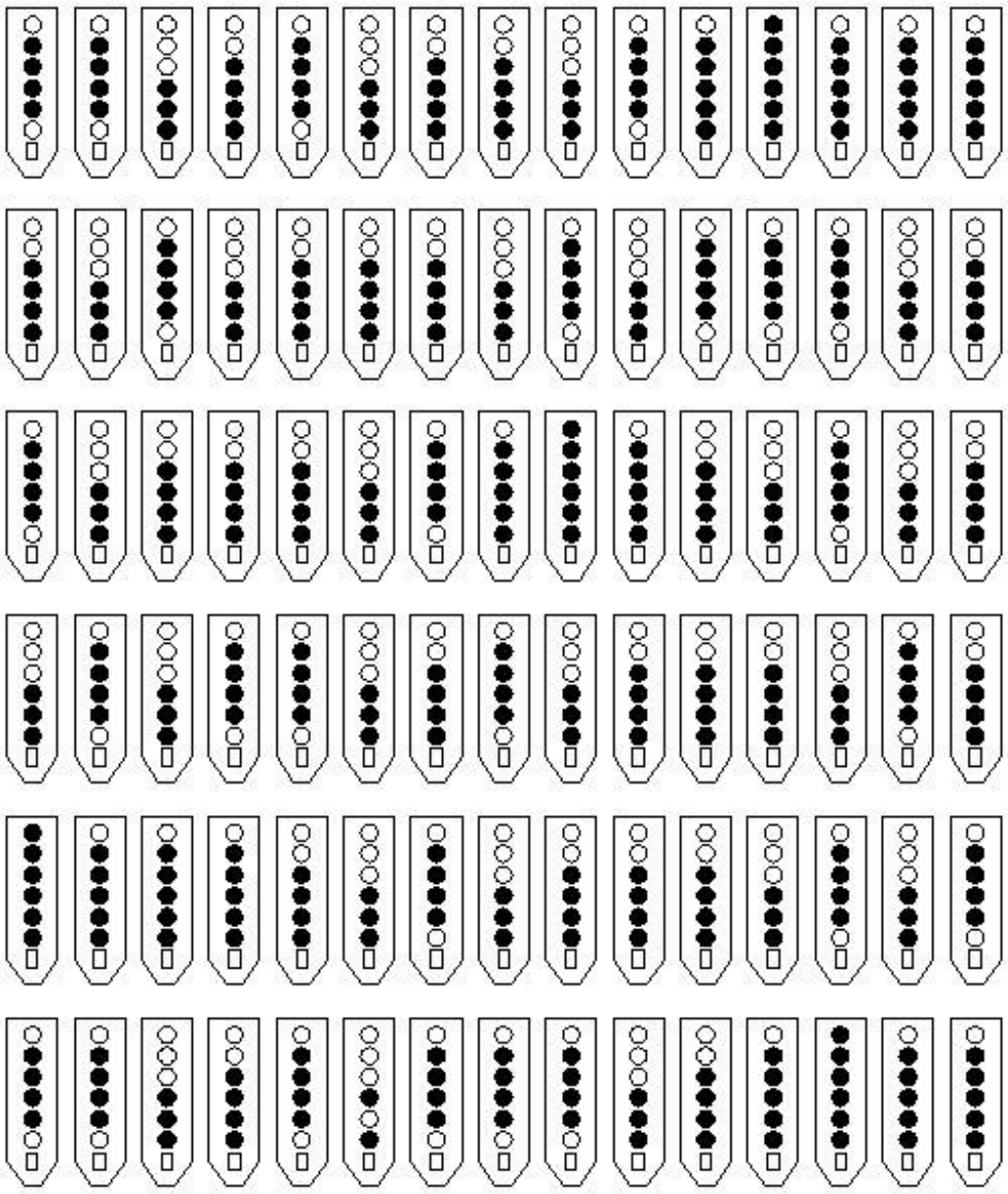
Roger Bennett
Redbird Flutes

Amazing Grace



○ Open ● Closed ◐ Half-Hole

Annie's Song



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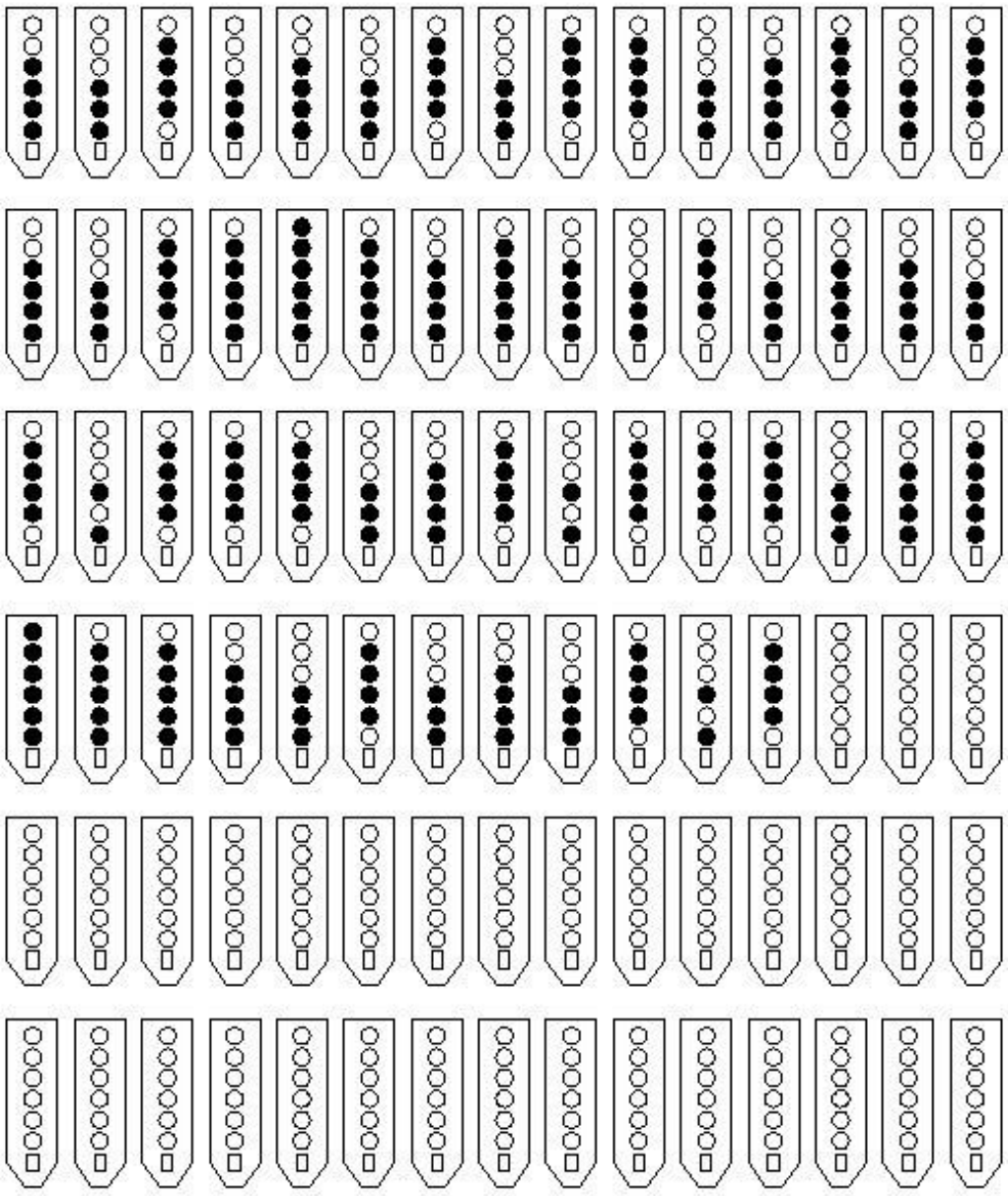

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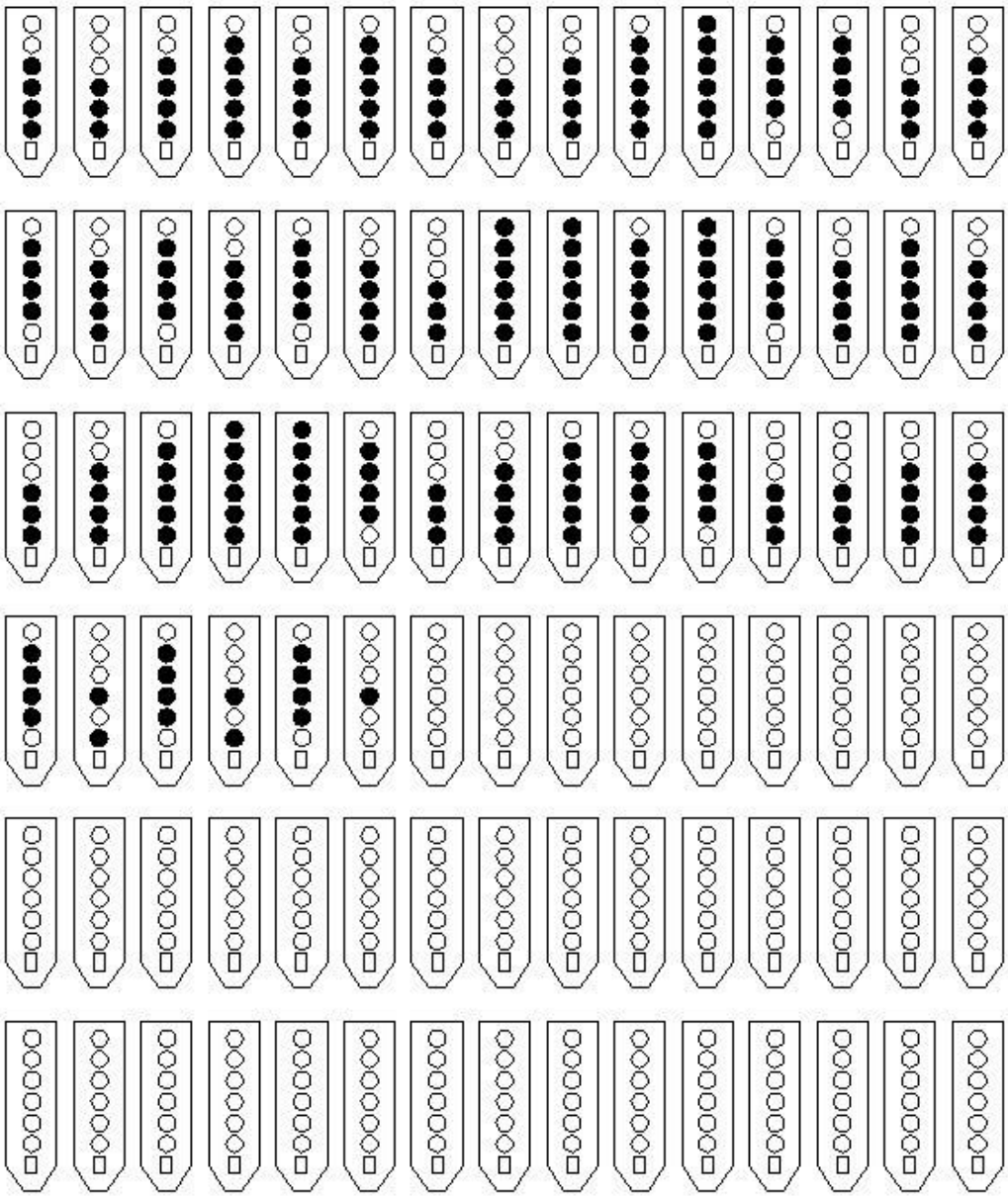
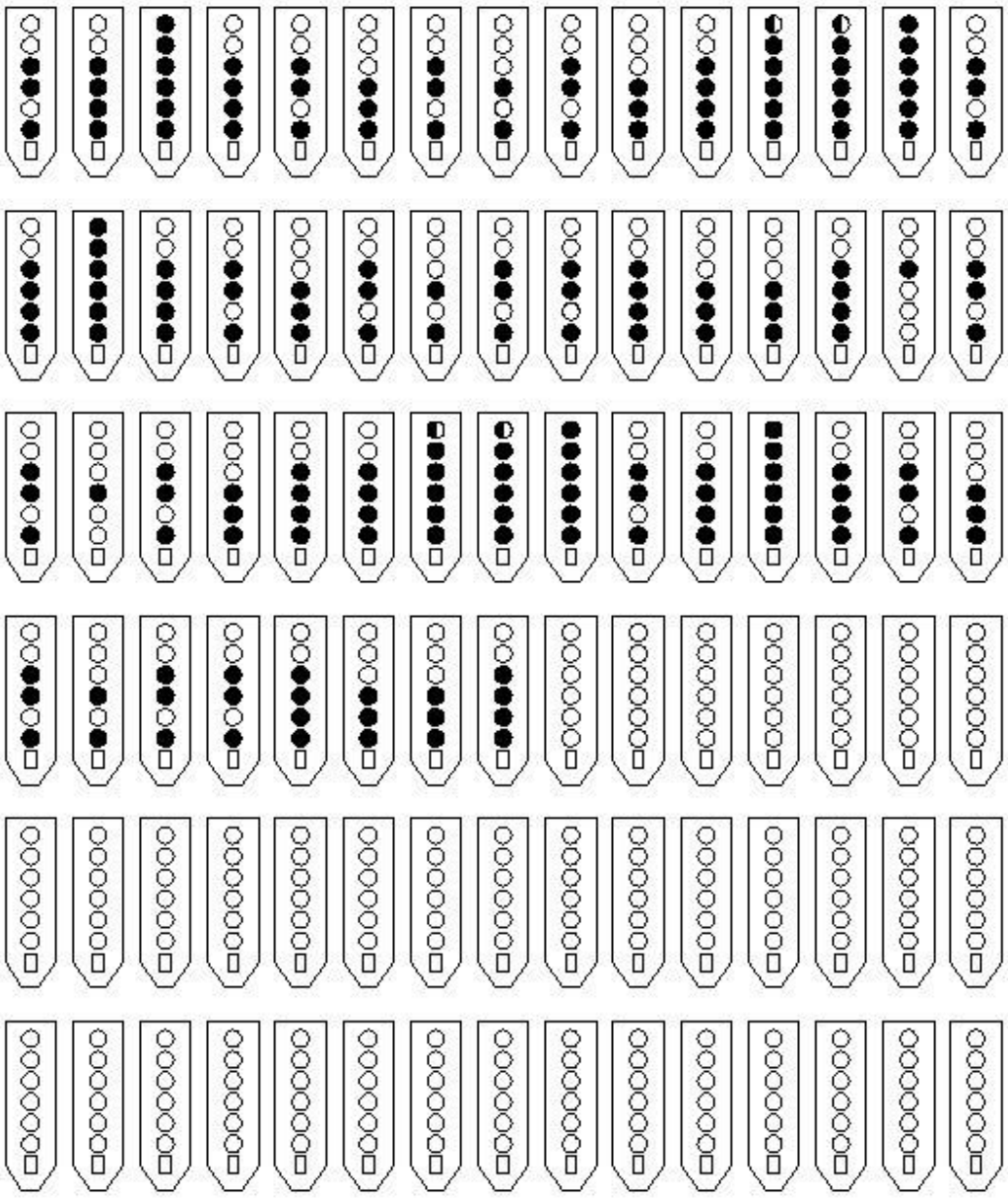
California Dreaming



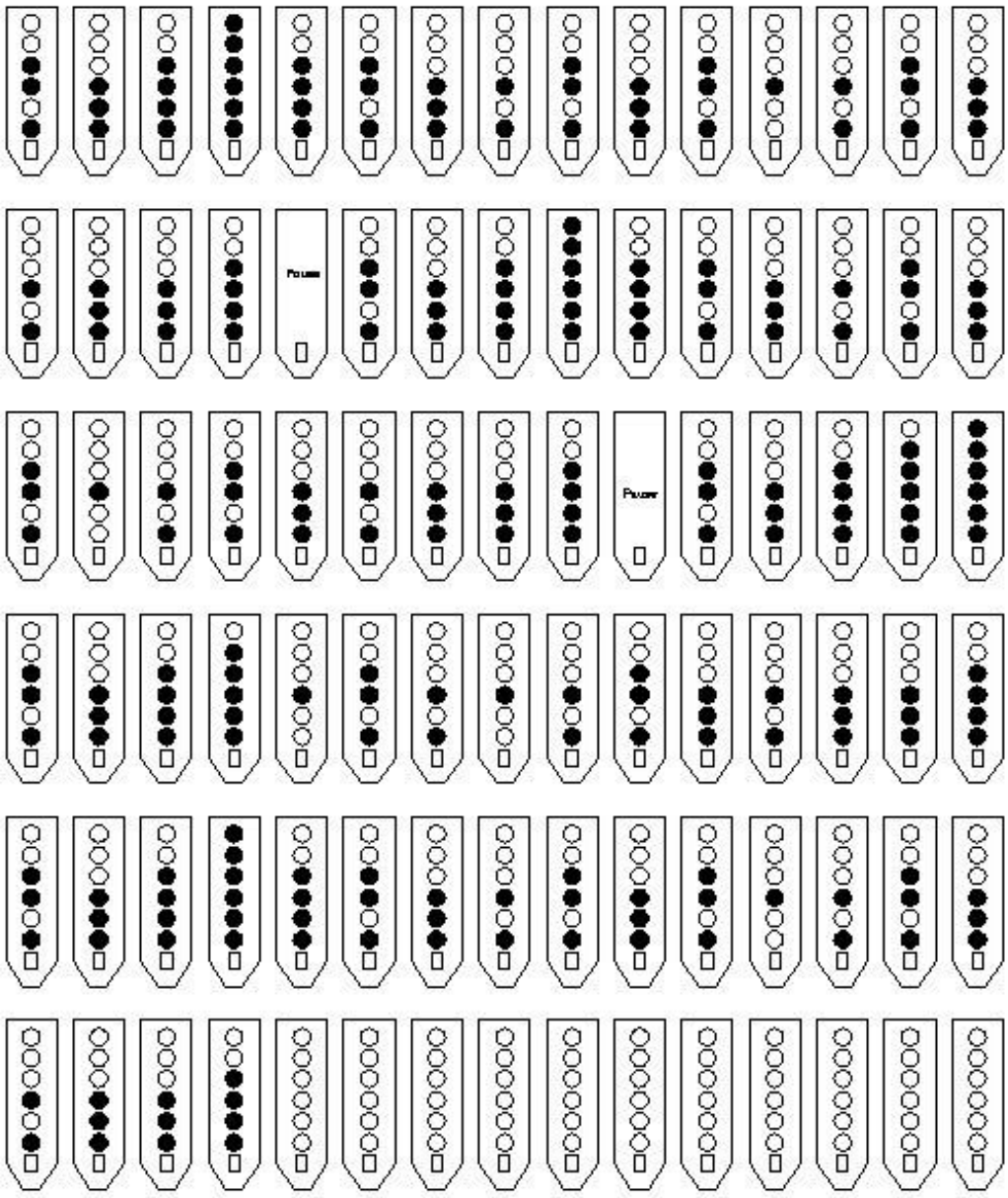
o Open ● Closed ◐ Half-Hole

I'll Fly Away



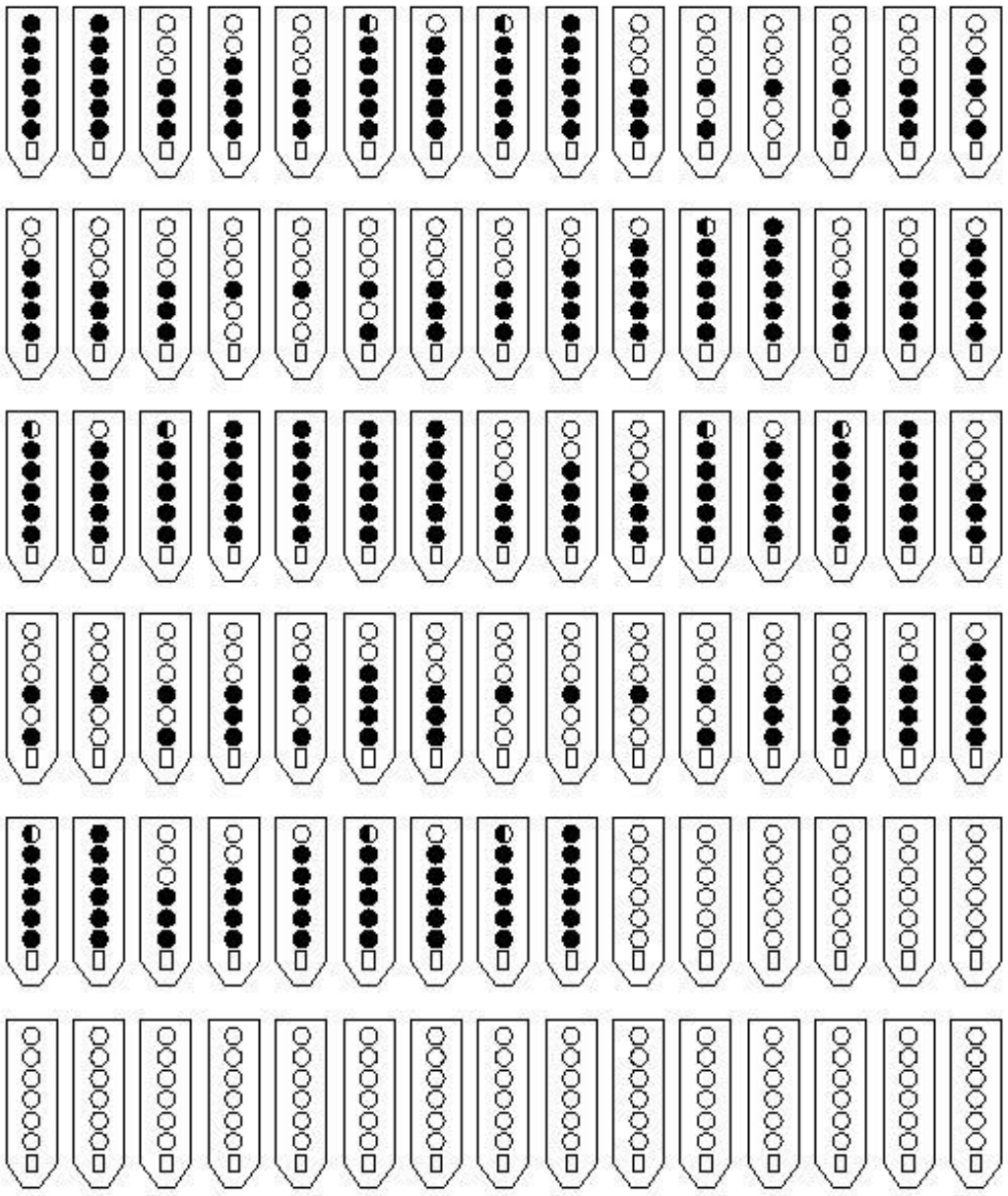
○ Open ● Closed ◐ Half-Hole

Last of the Mohicans

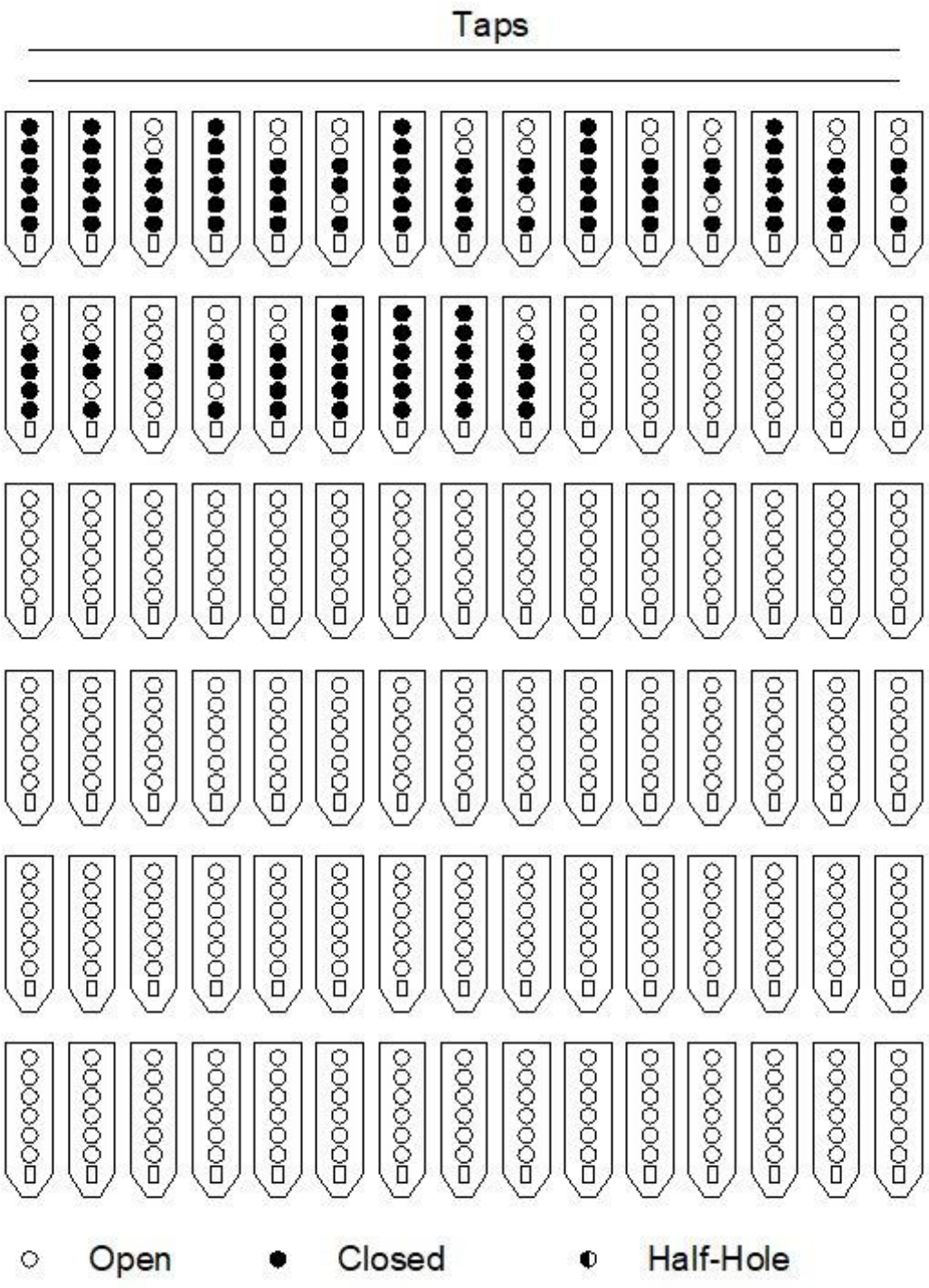


○ Open ● Closed ◐ Half-Hole

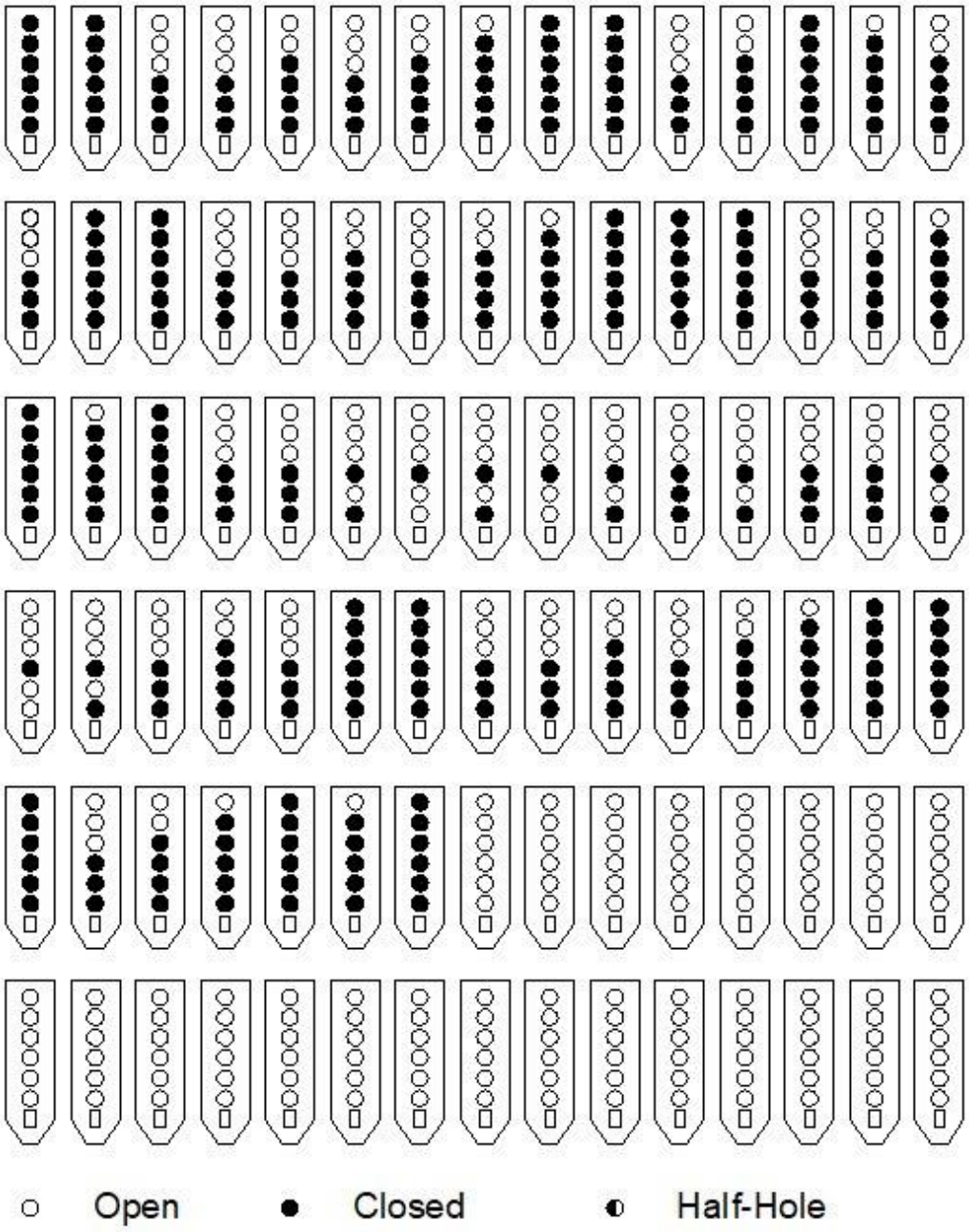
Scarboro Fair



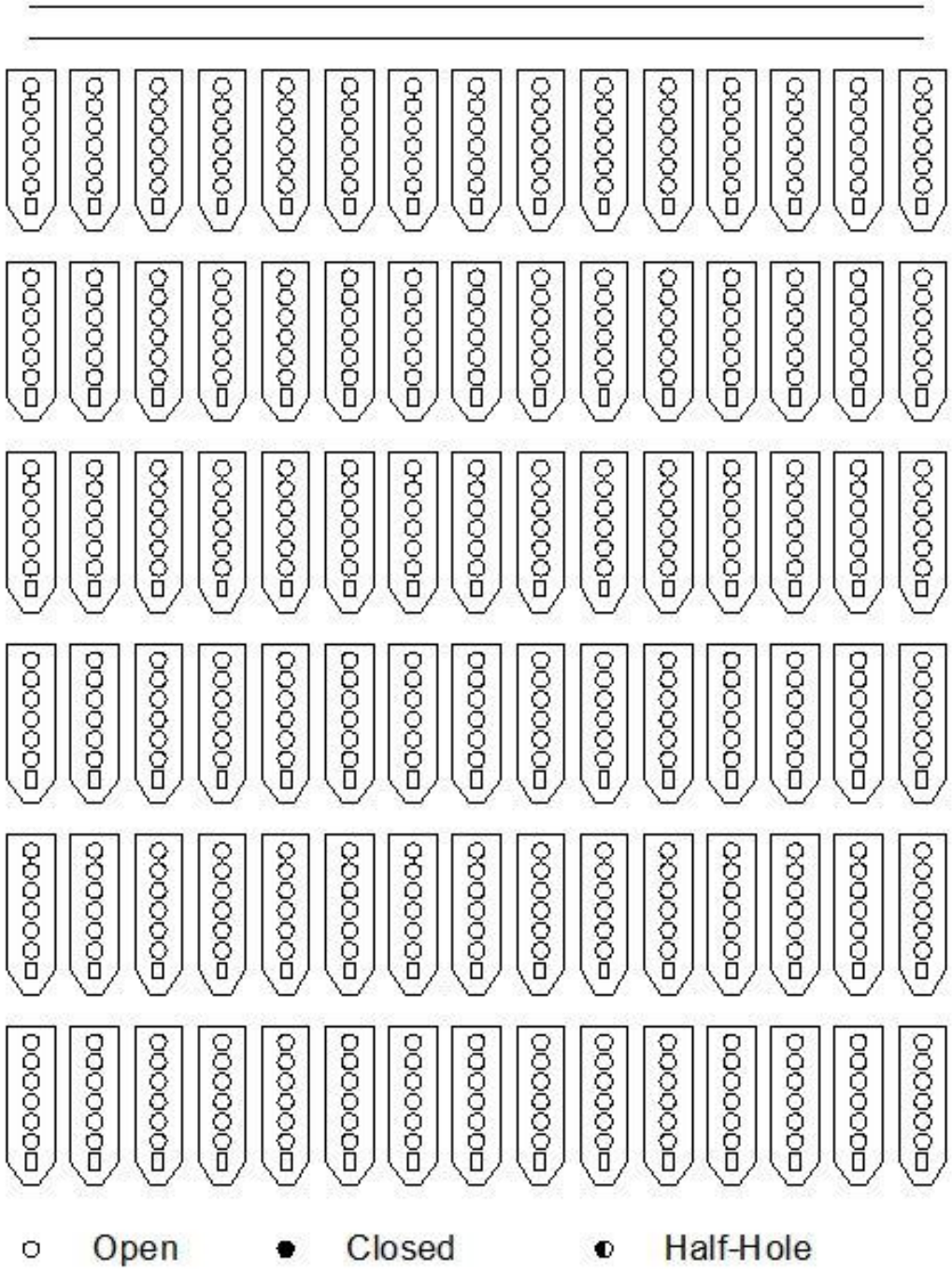
○ Open ● Closed ◐ Half-Hole


Taps
Open
Closed
Half-Hole

Wayfaring Stranger



○ Open ● Closed ◐ Half-Hole


Open
Closed
Half-Hole