

LET'S ACCESSORIZE!

CHOOSING TRIANGLES AND TAMBOURINES FOR YOUR SCHOOL PROGRAM

BEN STIERS

Thanks to the ears, imaginations, and handiwork of professional musicians and instrument builders, an incredible variety of percussion instruments are readily available to performers. There are so many possibilities and separating the “general-purpose” instruments from the “special-purpose” instruments as well as deciding which to purchase for your school program can be a daunting task. High-quality accessory percussion instruments are a significant financial investment, and many educators are working within budgets that require them to choose instruments that are as versatile as possible.

The following discussion is a broad overview of two of the most common accessory percussion instruments for band and orchestra: the tambourine and triangle. These two instruments were chosen because 1) there are numerous varieties of each available in terms of construction, quality, and intended purpose, and 2) it is my experience that school band and orchestra programs often lack appropriate versions of these instruments, often in favor of lower-quality or special-purpose models not suited for general use. The following information is intended to help the educator make informed decisions when purchasing tambourines and triangles; however, there is no substitute for trying out different varieties on your own and choosing the sounds you prefer. In fact, when deciding on instruments, a great approach is to ask your favorite local music store to loan you a variety of them to try out during a rehearsal in your performance space.

General Philosophy

First and foremost, always buy the best instruments you can afford. (Note that “best” is not the same as “most expensive”!) If you can only purchase one high-quality tambourine, for instance, it should produce a beautiful tone at all dynamic levels, create a characteristic sound in a variety of musical settings, and work well in all of the performing environments in which it will be used, from the concert hall to the marching field. Also, make sure your instruments are properly cared for—many accessory percussion instruments are fragile, but proper maintenance should help them last for a lifetime.

Note: It is the author's intent to present information in the most fair and unbiased way possible. Therefore, brand names are only mentioned when necessary. There are several manufacturers on the market producing high-quality instruments, and your personal taste is most important when selecting sounds that work in your program.

Tambourine

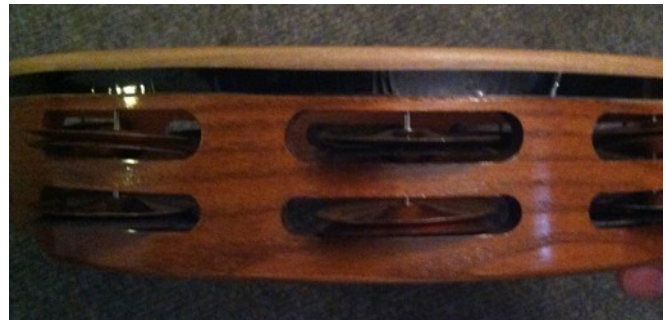
Construction

A concert tambourine is an essential part of every percussion section's instrument inventory. The standard concert tambourine is 10 inches in diameter and is made up of three parts:

-The *shell* of a tambourine will have slots cut throughout to accommodate the jingles. The most common configuration is two rows of jingles, which can be stacked directly on top of one another or staggered (Examples 1 and 2). More importantly, these slots should be different sizes to allow for smoother shake rolls (compare the height of the bottom row of jingle slots in both fig. 1 and fig. 2 to the top row). Tambourine shells are typically made of hardwood, and manufacturers now produce them in a variety of weights and depths—an important consideration for fitting the hands of younger or smaller students.



Example 1: Detail of Grover tambourine with alternating jingle slots



Example 2: Detail of Black Swamp tambourine with stacked jingle slots

-The *jingles* give the tambourine its distinct sound. High-quality tambourines contain jingles made of resonant metals (and, conversely, lower-quality tambourines contain jingles that are cheaper and less resonant). The primary metals used in concert tambourines are:

- German silver—bright, resonant sound
- Beryllium Copper—slightly darker than German Silver
- Phosphor Bronze—darker than Beryllium Copper, but still resonant
- “Specialty” alloys and heat-treated metals designed for greater articulation
- Brass—used as a “budget” option by some manufacturers

The bright tone of silver jingles is considered a “general” sound, and is a great place to start when exploring options. “Specialty” jingles (such as Black Swamp’s Chromium 25 and Grover’s Heat-Treated Silver and Copper options) create a “crunchy” sound that is best suited for occasions when maximum articulation is needed. However, certain models feature these jingles in combination with more resonant silver, bronze, or copper. This combination of resonance and articulation may be an optimal general-purpose sound in performance spaces that have unusually “wet” or “muddy” acoustics. Brass jingles are sometimes featured on entry-level tambourines but are not the best choice when the intention is to purchase a fine concert instrument.

-The *head* is an essential part of the concert tambourine—if it doesn’t have a head then it’s not a concert tambourine! Tambourine heads are traditionally made of calfskin, which provides excellent sensitivity. Unfortunately, calfskin heads can be negatively affected (sometimes drastically) by changes in temperature and humidity. High-quality synthetic (mylar plastic) heads are also available from some manufacturers, and are largely unaffected by the weather. However, mylar heads are slightly less dynamically sensitive than calfskin.

Tambourine Accessories

-*Bags*: Most manufacturers of fine tambourines now sell their instruments with a padded storage bag. If not, one should be purchased to protect the instrument when not in use.

-*Roll assistance*: It is often necessary to treat the head with something to facilitate thumb/finger rolls, such as beeswax (which is marketed by manufacturers but can also be purchased at craft stores) emery paper (which can be glued to the perimeter of the head), or other similar substances.

-*Misc.*: A variety of mounts, cradles, and other devices are also available to facilitate one-handed playing, quick transfers between instruments, and other extended techniques required in performance.

Maintenance

As stated above, tambourines should be kept in bags when not in use, preferably inside a secure storage space. Calfskin heads should be stored in an area with controlled temperature and humidity. Additionally, they should be checked regularly to make sure the head is at proper tension. A head that is too tight can be lightly rubbed with a damp paper towel to lower the pitch, and a head that is too loose can be heated with a heating pad (set on low, and don’t lay a beeswax-treated head face-down on the heat source!) to raise the pitch. The shell of the tambourine should be inspected periodically for damage, and to ensure that the pins that hold the jingles in place are secure.

Other Tambourines

Concert tambourines are both expensive and fragile. If the performer is called upon to play the tambourine with sticks, it may be a better idea to use a *mountable tambourine* designed to withstand such force. Many models are designed to clamp to a cymbal stand or other mounting post and feature a headless design with high-impact plastic shells specifically for this purpose. Hand-held *rock tambourines* are also convenient to have on hand for pep band, pops concerts, and other such settings. Crescent-shaped tambourines in particular keep the player's hand within the center of the instrument, allowing for longer playing without fatigue. Both mountable and hand-held rock tambourines come in a variety of sizes and sounds, and are significantly cheaper than concert instruments.

Selecting a "General-purpose" Tambourine

If you are purchasing a single general-purpose concert tambourine for your program, start with a 10-inch, double row instrument. German silver is the most versatile option, although silver combined with an articulate "specialty" alloy may be appropriate if more articulation is needed in your performance space. (Of course, you may also prefer the sound of copper or bronze with your ensemble—choose the sound you like best.) Calfskin heads are the best choice for a concert instrument, though they do require a bit of upkeep. However, if your tambourine will also be used for outdoor concerts or marching band a synthetic head will provide greater durability. It's a good idea to purchase at least one mountable and one rock tambourine as well, so that your concert instrument doesn't have to perform double duty in a setting that might lead to damage.

Triangle

Construction

Despite its humble appearance, the triangle is capable of a wide range of musical expression. The key to a great triangle sound is the production of a wide spread of overtones. While the beater choice, mounting system, and playing technique all have a role in sound production, a high-quality instrument is essential for proper tone. In other words, while it's certainly possible to make a "good" triangle sound "bad," it's virtually impossible to make a "bad" triangle sound "good"! Here are some factors to consider when choosing a triangle for your program:

-Material: *Steel* is the traditional metal of choice for triangle construction—for both high- and low-quality instruments. Quality steel triangles will produce a wide overtone spectrum, often assisted by a special plating process. In recent years *bronze* triangles have also become increasingly popular due to their ability to produce a complex, shimmering sound, with some selling for hundreds of dollars.

-*Size*: Concert triangles vary in size from 4 to 12 inches. A typical size for a “standard” triangle is the 6-9 inch range. All other factors being equal, the overall tone of the triangle will be lower in pitch as size increases. When choosing a size, it is important to note that large triangles can be played in such a way as to produce a light, delicate tone; however, small triangles will have a lower maximum threshold of volume and projection. Therefore, if you are selecting a single all-purpose instrument it may be better to consider the larger side to ensure maximum versatility. The thickness of the metal is also important to consider. Thicker triangles (approx. ½ inch in diameter) will have a fuller tone and greater projection. Thinner triangles—particularly those made of bronze—can produce a beautiful, shimmering tone, but will not speak as well at louder dynamics (Example 3)

-*Shape*: Most concert triangles have a standard equilateral shape. However, other options exist—most notably Alan Abel triangles. Identifiable by its isosceles shape and cut-away ends on the larger models, the Abel triangle has been an orchestral staple for decades. It typically creates a slightly more focused sound with a tighter overtone spread that some percussionists and conductors prefer.

-*Finish*: Most standard concert triangles offer a smooth finish that allows for a high level of consistency between instruments and also makes getting a consistent sound easier in passages with repeated notes—an important consideration for younger students. However, many manufacturers also offer hammered options. The hammering process creates a wider and more complex overtone spread, and ensures that each hammered instrument has a unique sound. On the other side of the coin, it creates an uneven playing surface (so repeated notes must be played more carefully to achieve a consistent sound) and also increases the price of most models.

Triangle Accessories

-*Clips/hangers*: In order to maximize tone quality, a triangle must be suspended as freely as possible. There are a number of devices on the market designed to do so, but the most versatile option is the triangle clip. Clips allow the triangle to be played while hand-held or attached securely to a mounting bar. Most manufacturers sell perfectly serviceable clips, and there are a number of online guides for creating your own with parts from the hardware store.



Example 3: Triangles (clockwise from left): 9 inch steel triangle, 6 inch hammered bronze triangle, 6 inch Alan Abel triangle

Clips should be insulated with rubber at the clamp point to prevent vibration transfer to the mounting bar, and should be easy to open and remove from the mounting bar with one hand. The suspension line that holds the triangle should be a very thin material that makes minimal contact, and should include a second “backup” line in case the first breaks. It is ideal to have two clips per triangle for situations that require the performer to mount the triangle from both closed ends and play fast passages with two beaters.

-*Triangle beaters*: There are two broad types of triangle beaters: *graduated* beaters and *rod-style* beaters (Example 4). Graduated beaters feature a thin metal handle (often covered in a rubber grip) with a thicker playing area at the end. This playing area may be a solid piece of metal, or it may be a hollow tube affixed to the handle with some kind of adhesive. Rod-style beaters are a simple design—just a straight rod of steel, often with a rubber grip on one end. Graduated beaters are typically more expensive than rod-style beaters, but are preferable in most cases. The added weight at the beating end produces more tone and less metal-on-metal “tick” than rod beaters. However, rod-style beaters can be useful in rapid passages that require clear articulation. It is recommended that beaters always be purchased in matching pairs, especially rod-style beaters. Beaters are sold both individually and in sets of graduated size. When selecting sizes to purchase, again, erring on the large side will ensure that your triangle beaters have sufficient mass to create a full sound at all dynamic levels.

Maintenance

Like tambourines, triangles should be stored securely when not in use. Bags are available for individual triangles, but a great option is a bag that allows multiple triangles, clips, and beaters to be stored all in one place, such as Black Swamp Percussion’s Triangle Gig Pack. This helps to keep the disappearance of clips and beaters (an all-too-common occurrence in many band rooms) to a minimum. Triangle clips should be inspected frequently to ensure that both suspension lines are present and intact. If triangles are to be used outside, they must be kept dry to prevent corrosion.



Example 4: Examples of graduated triangle beaters (left) and rod-style triangle beaters (right)

Selecting a “General-purpose” Triangle

For most school programs, a 6-9 inch steel or bronze triangle will be the most versatile option if only one triangle is to be purchased. The metal should be of a thicker diameter (around ½ inch) for when maximum projection is needed. Steel (preferably plated steel for maximum overtone production) will be a more cost-effective option. Thinner bronze triangles can also work beautifully but may lack the volume needed in certain situations. Plan to purchase (or build) a minimum of two matching clips for your triangles, and choose at least one pair of graduated beaters in medium to heavy weight (depending on the size of your triangle). If funds allow, it is a good idea to purchase a few pairs of graduated beaters in different weights and a few pairs of rod beaters. Again, if at all possible, a method of storage that will keep all of these parts in one place is also worth the investment.

Summary

There are numerous tambourine and triangle varieties available for music educators to purchase for their programs. Sorting through the options to find the best fit for your program is an essential but often overwhelming task. Whenever possible, ask your percussion friends and colleagues for advice, try out different options before buying, and choose sounds that *you* prefer. While it would be wonderful to have the financial resources to purchase every tambourine, triangle, and beater on the market, in reality we often have to choose a small number of instruments (sometimes just one) that will work in as many settings as possible. It is hoped that the information provided above will make that choice a bit more straightforward, so that you can spend less time debating the merits of one tambourine over another and more time in making music with your students. •

Dr. Ben Stiers is Assistant Director of Bands, Athletic Bands and Percussion at Illinois State University, where he directs the Pep Band and Drumline and serves as assistant director of the Big Red Marching Machine. Prior to his time at ISU, he served as percussion instructor at Centre College in Danville, Kentucky. In addition, he has been a member of the marching percussion faculty for the Music for All Summer Symposium since 2003, and has been employed as a writer, arranger, instructor, and consultant for several high school percussion programs in Illinois, Nevada, and Kentucky. Dr. Stiers earned his DMA in Percussion Performance from the University of Kentucky, where he also received a certificate in music theory pedagogy. He holds a Master’s Degree from the University of Nevada-Las Vegas and a Bachelor’s Degree from Illinois State University. His teachers include James B. Campbell, Paul Deatherage, John Willmarth, Dean Gronemeier, Timothy Jones, David Collier, and Tom Marko. His performing experience includes extensive freelance work in the Las Vegas area, appearances with the Peoria Symphony Orchestra, the Illinois Symphony Orchestra, the Heartland Festival Orchestra, the Las Vegas Philharmonic, and the Lexington Philharmonic Orchestra, and performances abroad with chamber music ensembles in Australia and Taiwan. He also served as the Vice President of the Kentucky chapter of the Percussive Arts Society from 2010 – 2011. Dr. Stiers is a member of the Percussive Arts Society, the College Band Directors National Association, the College Music Society, and the Society for Music Theory, as well as an education endorser for Innovative Percussion, Inc.