Tuning & Creative Use of Marching Percussion  

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Jim Ragsdale, Alamo Heights HS, San Antonio, TX

Tuning the battery equipment can be a long and sometimes intimidating process. However, battery tuning plays a very important role in the overall sound of the marching band. The method in which the marching drums are tuned has an overwhelming effect on the ensemble sound. An important factor to remember is that the marching percussion section should complement, support, and blend within the rest of the ensemble. Keep in mind that the snare section will provide the soprano voice, the tenor section the alto and tenor voices, and the bass section the bass voice. Tune the full battery section according to the SATB choir. Try to maintain good tuning on all drums each and everyday. Having drums that are not properly tuned will most certainly affect how the director and student interpret what they hear within the ensemble. Keeping the battery tuning consistent from day to day will also help students develop better confidence and consistency.

General Drum Maintenance For All Sections

While the drum head is off  
Clean the inside of the shell. Do not use any products while cleaning the shell, use only a towel or cloth.  
Clean the bearing edge of any stick tape, dirt, wood shavings, grease, or general gunk that may have built up.  
Check the bearing edge to make sure it is smooth where it will come in contact with the head. If the bearing edge is chipped or splintered, lightly sand it down using fine grade sandpaper. Sanding down the bearing edges will ensure drum head life and will be helpful when fine tuning each drum.  
Check all screws inside the shell and tighten those that are loose.  
Apply lithium grease or anti seize to the inside of the lug casings. Vaseline products or WD40 are not recommended because they cannot hold up and tend to liquefy in high temperatures. Due to the high amount of tension on marching drums, keeping the lug casings and tension rods lubricated is important and will make the tuning process easier.  
Clean the tension rods of dirt, old grease, and buildup.

Applying the Drum Head  
Set the head on the bearing edge. Make sure that the drum head comes in contact evenly with the bearing edge and that the logo is in the desired position.  
Set the rim on top of the head. Make sure that the rim is even around the head and that all lug casings and tension rods are aligned with one another.  
Using a star pattern, tighten each tension rod as tight as possible with your fingers. Check to make sure that all lugs have consistent tension.

Tuning the Drum Head  
Using a star pattern, begin to seat the head by turning each tension rod 1 full turn at a time. Repeat this process. As the tension increases, begin using 1/2 and 1/4 turns until the head is slightly below its desired pitch. It is important to be patient through this process. Allow the head to stretch slowly and evenly.  
Once the head has reached a reasonable pitch, begin the fine tuning process by matching the pitch of every tension rod. Fine tuning the drum head is done easiest by striking the head with a stick about 2 inches away from the rim. Muffling the drum head will reduce overtones and may make the fine tuning process easier. Again, it is important to be patient throughout this process.  
Once the head has been “cleared,” continue to increase tension until it is within the desired range.

Instrument Specific Head and Tuning Suggestions

Snare Drum: The Soprano Voice  
Heads  
Mylar  
Kevlar  
Pitch Levels  
Fine Tuning Suggestions  
★ Begin by tuning the batter head to a medium high pitch. Once the batter head has been fine tuned, repeat this process with the snare side head. When both heads are in tune with themselves, raise the pitches to the desired range. While there are many varying opinions regarding snare pitch levels, I suggest tuning the bottom head to a D and the top head slightly lower.  
★ The single most important aspect in producing a characteristic snare drum sound is tuning the individual guts. With the snare unit off, place a pencil or dowel beneath the guts opposite the throw off system. After turning the snare unit on,
turn the snare dial until the guts are tight enough to determine their pitch. Pluck each gut and adjust its pitch on the end of the snare unit using a screwdriver.

Tenor Drums: The Alto and Tenor Voices

Heads
- Clear
- Coated

Pitch levels

Fine Tuning Suggestions
An important key to tenor drum tuning is to allow the heads to settle. After replacing the tenor heads, it is usually best to take the tension up slowly and carefully. I suggest tuning tenor heads to medium tension levels at first and waiting at least a day before “cranking” the heads up. It is also helpful to play on the heads before tuning them into their desired range.

Tips for Tuning

Bass Drums: The Bass Voice

Heads
- Single Ply
- Double Ply

Fine Tuning Suggestions
- Bass Drum heads take a while to stretch and usually sound better after sitting for a few days. For this reason, it is best to take the tension up slowly and carefully. When replacing bass drum heads, be patient and allow a couple of days before bringing the heads up to the desired pitch.
- A very important aspect of bass drum tuning is keeping each individual head “cleared.” Time and attention must be given to tuning each portion of the head for consistency. Bass drums that are tuned properly will produce a very clear tone while drums that are out of tune will produce irritating overtones. Likewise, it is equally important that both heads produce the same pitch.

Tips for Tuning

Muffling
- Applying muffling will help dry out the overall sound of the bass drums. Muffling can be used if the bass drum heads produce too much ring.
- Muffle the bass drums so that they provide clear articulation with tone. A good amount of muffling is needed in most of today’s marching ensembles.

Rehearsal Ideas for the Marching Percussion Section

In this section, I would like to discuss some ideas that will help the rehearsal process run smoothly. It is important to establish a rehearsal routine early in the marching band season. Establishing and maintaining a set of rehearsal expectations will not only save an enormous amount of time, it will also give students a structured environment and make them more successful.

Equipment and Supplies
- Three Ring Binders with Plastic Sheet Protectors
- Pencils
- Dot Books or Drill Sheets
- Instruments/Sticks/Mallets

General Rehearsal Etiquette

Appearance
- Require all students to use the same sticks and mallets within their section. Sticks and mallets should be taped the same color.
- Make sure all drums are set up in a uniform position whether on the harness or on a stand. I do not require all drums to be the same height because every student’s body is different. Set up the drum so that the student is relaxed and comfortable.
- Make sure all logos are in the same position

Process
- A count/tap off should be used when rehearsing any exercise or musical phrase. The most common count/tap off is usually 8 beats in length and is given by the center snare or the most consistent player. An alternative to this method is using a metronome for the count off. Whichever method you choose, be consistent and do things the same way each time.
- Define when students should bring their sticks in and out. Usually, the sticks are brought out on beat 7 of the count/tap off and brought in 1 beat after the last note. Have students practice bringing their sticks in and out, even when performing numerous repetitions of an exercise or musical phrase.
- Have the battery students mark time to all exercises and music. The marching percussionist must have a solid understanding of how their hands and feet correlate. Marking time will help students develop coordination between their feet (the downbeats) and hands (the music). Marking time will help reinforce solid time keeping.
- The use of a metronome can be a very important tool for rehearsing the marching percussion section.
Warm Up/Exercise Program

The importance of having a comprehensive exercise program cannot be overstated. The warm up program should serve as the foundation for continued growth and improvement for the students. Each exercise should serve a purpose and have the intent of teaching and developing a particular technique or skill (ie: stroke type development, timing, and rudimental patterns). The overall goal of the exercise program is to improve the fundamental playing of each student and make the show music cleaner and more precise.

The Four Basic Stroke Types

- Rebound (Full) Stroke – starts in the up position, ends in the up position
- Down Stroke – starts in the up position, ends in the down position
- Tap Stroke – starts in the down position, ends in the down position
- Up Stroke – starts in the down position, ends in the up position

Rebound Exercises (8 on a hand)

When playing this exercise, listen for consistency of tone and rhythm in each hand. Focus must be maintained when transitioning from hand to hand because the quality of sound and timing can become easily distorted. Bass Drum and Tenor Drum sections should begin playing in unison and then progress to basic "split or around" patterns. The bass drum section can add 16th, sextuplet, and 32nd note splits after they become comfortable with 8th note patterns. Incorporate crescendos and decrescendos to this exercise to improve the ensemble's musicianship.

Accent Tap Exercises (Bucks)

The ability to control the sticks when playing two dynamics will take some time to develop. It is important to practice playing two height exercises very slowly at first. In general, two height exercises should be played using a forte dynamic level for the down strokes and a piano dynamic level for the tap and up strokes. Many percussion instructors call this concept "12 and 3".

Double Stroke/Triple Stroke Exercises (Double Beat, Triple Beat)

The single most important concept to remember when rehearsing double or triple stroke exercises is to give equal quality of sound to each note. The technique used for this exercise will vary depending on the tempo. Remember – each note should have equal volume. Treat the double/triple strokes as one height and play them using a rebound stroke.

Diddle and Roll Development Exercises (16th and triplet based patterns)

Diddle and Roll Exercises should be practiced at a slow tempo at first. Emphasis should be placed on producing even and accurate rhythms when playing diddle stickings. Make sure to play with equal quality of sound on each diddle and from the right hand to the left. Accents should be avoided at the beginning and end of rolls and all fingers should maintain contact with the stick.

Timing Exercises

Timing exercises should be rehearsed each and every day. Timing exercises should be played at one dynamic without accents. Keep consistent height, sound, and hand motion on all rhythms and use natural stickings.

Goodies and Fun Stuff

- Exercises to develop rudiments
- Paradiddles, flams, flam accents, flam taps
- 60 second warm-ups
- Cadences

Front Ensemble Exercises

- Scales and Arpeggios in all 12 major keys
- Battery Exercises using practice pads
- Timing Development
- Rudiment Development
- Music Reading
Ensemble Keys to Development

- Have the battery and pit play together as often as possible (warm ups & music)
- Rehearse exercises at a variety of tempos
- Rehearse exercises at a variety of dynamics
- Rehearse with and without the metronome
- Encourage students to play accurate rhythms and keep steady tempo

PERCUSSION ARRANGING

Using music notation software

- Make scores easier to read
- Save time by extracting individual parts
- Provide playback source on your computer

Detailing Scores

- Produce as detailed a score as possible to help get the most musical performance

Know the material

- Listen to as many original recordings and arrangements as possible
- Study scores and become very familiar with inner workings of the music
- Try to imitate and emulate the original music

Create a plan

- Identify phrases and define their function
- Establish the primary voice

Know the role of the percussion section and make the other musicians sound good

- Compliment and improve the sound of the marching band
- Be sensitive musically
- Sometimes the percussion section is the primary voice and others times the section is secondary

Material

- Write challenging material but not so much that it is distracting or unattainable by the performers
- Don't throw in too many ideas at a time
- Arrange for the big picture and allow the woodwind and brass sections to take priority when necessary

Instrumentation

- Battery Section = SATB choir
- Front Ensemble = concert percussion ensemble
  - Keyboard choir
  - Timpani as bass voice
  - Traditional percussion instruments
  - Hand percussion and accessories

Additional resources

- Up Front by Jim Casella and Jim Ancona (Tapspace Publications)
- Fresh Perspectives for the Modern Drumline by Jim Casella and Murray Gusseck (Tapspace Publications)
- Field Level by Mike Lynch and Scott Brown (Row-Loff Productions)
- Stick Control by George Stone
- Rudimental Logic by Bill Bachman (Row-Loff Productions)
- Mobile Percussion Seminar by Thom Hannum (www.percussion.org)