Welcome!

On behalf of the musicians and staff of the Milwaukee Symphony Orchestra, I am pleased to welcome you to our 2018.19 education season. We are thrilled to have you and your students come to our concerts. It will be a fun, educational, and engaging musical experience. To help prepare your students to hear this concert, you will find key background information and activities for all of the featured musical selections and their composers. Additionally, two Comprehensive Musicianship though Performance model lessons are presented. These pieces have skill, knowledge and affective outcomes, complete with strategies and assessments. It is our hope that you will find this guide to be a valuable tool in preparing your students to hear and enjoy Musical Zoo. We invite you to review these materials and provide feedback – we want to know what you think! Special thanks to Forte, the MSO Volunteer League, for their volunteer support of MSO Education initiatives. We thank the docents and ushers who generously give their time and talents every season.

Marion Gottschalk, Forte Chair
Holly Klietz, Education Chair
Sue Doornek, Docent Chair
Ann Furlong, Usher Co-Chair
Sherry Johnston, Usher Co-Chair
Maureen Kenfield, Usher Co-Chair

Thanks to the following people for their contributions to these concert preparation materials:

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content author
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graphic design

Again, we appreciate your attendance and hope to see you at another concert soon!

Sincerely,

Rebecca Whitney
Director of Education, Milwaukee Symphony Orchestra

For more information about the Comprehensive Musicianship through Performance model, please go to wmea.com/CMP
Audio Guide

The MSO uses the Naxos Music Library as the Audio Guide to accompany this Teacher Resource Guide. A Playlist for this concert has been created for your ease of use for listening to repertoire.

To access the Naxos Playlist for this concert, please follow these instructions:

- Login on the upper right-hand side using this login information (case-sensitive):
  - Username: msoMM
  - Password: msoMM
- Select “Playlists” from the top of the website, near the middle.
- On the left-hand side, choose the “Concerts for Schools 2018.19” folder.

All concert playlists will appear to the right of the folder. Double-click on “Musical Zoo” to open.

To play a single track, check the box next to the track and click “play.”
To play the entire Playlist, check the box next to “No” at the top of the Playlist and click “play.”

Having issues using the Naxos Music Library? Contact the MSO Education Department at 414.226.7886.

**PLEASE NOTE**: The Naxos playlist can host a limited number of users at one time. Please make sure to LOG OUT of the system when done using it.
Have Fun with the Milwaukee Symphony

Before You Come

Leave food, drink, candy, and gum behind — avoid the rush to the trash cans!

Leave your backpack at school — why be crowded in your seat?

Go to the bathroom at school so you won’t miss a moment of the concert!

When You Arrive

Ushers show your group where to sit. Your teachers and chaperones sit with you.

Get comfortable! Take off your coat and hat, and put them under your seat.

If you get separated from your group, ask an usher to help.

Listen Closely

Watch the conductor. Can you figure out which instruments will play by where he/she is pointing or looking?

See if you can name which instruments are playing by how they sound.

Listen for the melodies and try to remember one you’ll be able to hum later. Then try to remember a second one. How about a third?

If the music were a movie soundtrack, what would the setting be? What kind of story would be told?

Pick out a favorite moment in the music to tell your family about later. Keep your thoughts to yourself at the concert — let your friends listen in their own way.
About the Milwaukee Symphony Orchestra

The Milwaukee Symphony Orchestra is among the finest orchestras in the nation. Since its inception in 1959, the MSO has found innovative ways to give music a home in the region, develop music appreciation and talent among area youth, and raise the national reputation of Milwaukee.

The MSO’s full-time professional musicians perform more than 135 classics, pops, family, education, and community concerts each season in venues throughout the state. A pioneer among American orchestras, the MSO has performed world and American premieres of works by John Adams, Roberto Sierra, Phillip Glass, Geoffrey Gordon, Marc Neikrug, and Matthias Pintscher, as well as garnered national recognition as the first American orchestra to offer live recordings on iTunes. Now in its 47th season, the orchestra’s nationally syndicated radio broadcast series, the longest consecutive-running series of any U.S. orchestra, is heard annually by more than two million listeners on 147 subscriber stations in 38 of the top 100 markets.

The MSO’s standard of excellence extends beyond the concert hall and into the community, reaching more than 40,000 children and their families through its Arts in Community Education (ACE) program, Youth and Teen concerts, Family Series, and Meet the Music pre-concert talks. Celebrating its 29th year, the nationally-recognized ACE program integrates arts education across all subjects and disciplines, providing opportunities for students when budget cuts may eliminate arts programming. The program provides lesson plans and supporting materials, classroom visits from MSO musician ensembles and artists from local organizations, and an MSO concert tailored to each grade level. This season, more than 7,300 students and 500 teachers and faculty in 20 Southeastern Wisconsin schools will participate in ACE.
About the Conductor

Yaniv Dinur

Yaniv Dinur is the associate conductor of the Milwaukee Symphony Orchestra and the music director of the New Bedford Symphony Orchestra in Massachusetts. He made his conducting debut at the age of 19 with the National Symphony Orchestra of Ireland, a performance that resulted in multiple return engagements with the NSO. Following his European debut, he was invited to perform with the Israel Camerata, making him the youngest conductor ever to conduct an orchestra in Israel.

He since conducted the Israel Philharmonic Orchestra, Jerusalem Symphony, Houston Symphony, San Diego Symphony, Louisiana Philharmonic, New World Symphony Orchestra, San Antonio Symphony, Orchestra Giovanile Italiana, Orchestra di Padova e del Veneto, Orchestra Sinfonica Abruzzese, Pomeriggi Musicali in Milan, Solisti di Perugia, Torino Philharmonic, Portugal Symphony Orchestra, Sofia Festival Orchestra, State Orchestra of St. Petersburg, Orquesta Filarmónica de la UNAM in Mexico, and the National Arts Centre Orchestra in Ottawa.

Dinur is the winner of numerous awards, among them the 2017 and 2016 Solti Foundation U.S. Career Assistance Awards, 2nd Prize at the 2009 Mata International Conducting Competition in Mexico, and the Yuri Ahronovitch 1st Prize in the 2005 Aviv Conducting Competition in Israel. He was chosen by the League of American Orchestras to be a featured conductor in the 2011 Bruno Walter Conducting Preview, and he is a recipient of the America-Israel Cultural Foundation and the Zubin Mehta Scholarship Endowment. He has worked closely with such world-class musicians as Lorin Maazel, Michael Tilson Thomas, Edo de Waart, Pinchas Zukerman, Itzhak Perlman, and Kurt Masur.

Yaniv Dinur is also an accomplished pianist and a passionate music educator who is committed to exposing new audiences to classical music. Since joining the Milwaukee Symphony, he has performed with the MSO in unusual venues such as an industrial design factory, an unfinished office building, and a planetarium in concerts created especially for young professionals. He has also performed in underserved neighborhoods in Milwaukee, bringing orchestral music to people who do not usually have access to it. He often gives pre-concert talks and lectures at different venues around town, in which he incorporates live demonstrations on the piano, aiming to reveal surprising connections between pieces, composers, and eras. In addition, he created a series of short, fun YouTube videos that give a deeper look into musical pieces of all genres.

Dinur was born and raised in Jerusalem, where he studied piano with his aunt, Olga Shachar, and later with Alexander Tamir, Tatiana Alexanderov, and Mark Dukelsky. He studied conducting with Dr. Evgeny Zirlin and Prof. Mendi Rodan at the Jerusalem Academy of Music and Dance. In 2007, he moved to the United States to study with Prof. Kenneth Kiesler at the University of Michigan, where he earned his Doctorate in Orchestral Conducting.
YOUTH PERFORMANCE IV

Musical Zoo

Tuesday, November 13, 2018 at 10:00 AM
Tuesday, November 13, 2018 at 11:30 AM

Uihlein Hall

Milwaukee Symphony Orchestra | Yaniv Dinur, conductor
Jim LaBelle, narrator

Danceworks Performance Company | Gina Laurenzi, Maggie Seer, Wanyah Frazier
Danceworks Youth Performers | Mirella Altoro, Anabella Borowski, Georgia Bruder, Isabel Franco,
Melissa Henningsen, Maribel Madi, Stella Metcalfe, Marcia Olson,
Shir Posner, Neveah Riseling, Clara Zippelr

DANIEL DORFF ....................... Three Fun Fables, for Narrator and Orchestra
I. The Fox and the Crow
II. The Dog and His Reflection
III. The Tortoise and the Hare

SAINT-SAËNS ......................... Carnival of the Animals
I. Introduction and Royal March of the Lion
II. Hens and Roosters
X. Aviary
IX. The Cuckoo in the Depths of the Forest
VIII. People With Long Ears
III. Horses of the Tartary (Fleet Animals)
IV. Tortoises
VI. Kangaroos
VII. Aquarium
V. The Elephant
XI. Pianists
XII. Fossils
XIII. The Swan
XIV. Finale

*PLEASE NOTE* that the movements of Carnival of the Animals will be performed out of their standard order.
It’s a zoo in here! As you listen to Camille Saint-Saëns’s *Carnival of the Animals* and Daniel Dorff’s *Three Fun Fables* for Narrator and Orchestra, use your imagination to visit some of your favorite animals at the zoo. Our guests from Danceworks will be portraying the creatures of *Carnival of the Animals* through movement. Think about how both composers make the different pieces sound like different animals. Which one is your favorite?

**DANIEL DORFF (1956-)**

Daniel Dorff was born in New Rochelle, NY in 1956. He won First Prize in the Aspen Music Festival’s annual composers’ competition at age 18 for his *Fantasy, Scherzo and Nocturne* saxophone quartet. Dorff studied saxophone and bass clarinet and received degrees in composition from Cornell and the University of Pennsylvania. While at the University of Pennsylvania, he was a student of American composer George Crumb. In 1996, Dorff was named Composer-In-Residence for Symphony in C (formerly Haddonfield Symphony), in which he played bass clarinet from 1980 through 2002. He has led an exceptional career as a composer. Being performed and recorded frequently are his compositions for flute and piccolo, which have become standard repertoire selections. Dorff is also an incredibly accomplished composer of children’s music and is one of the most performed composers of the genre. His most notable compositions of the genre are *Billy and the Carnival*, *Three Fun Fables*, and *Blast Off*.

Dorff serves as Vice President of Publishing for Theodore Presser Company and has lectured at many colleges, as well as Carnegie Hall, on music engraving and notation. He serves on the Board of Directors for the Music Publishers’ Association of the USA, the Board of Directors of the National Flute Association, and the Executive Board of The Charles Ives Society. The world premiere of his *Concertino for Flute and Orchestra* was heard on the NFAM’s annual concerto night in August 2018. Dorff will also be the featured composer of New Music Delaware’s mini-festival later this year at the University of Delaware.

**Jim LaBelle**

Jim LaBelle is a graduate of Burlington (WI) High School and Luther College, Decorah, IA, where he majored in vocal music performance and fine arts administration. After 26 years on the radio (“Lips LaBelle” 94.5 WKTI) he transitioned into consulting performing arts groups on marketing, development, and administration. Now retired, he devotes his time to performing with Bel Canto Chorus, Milwaukee Chamber Choir, the Choir of First Congregational Church in Wauwatosa, and the Sweet Applewood Barbershop Quartet.
THREE FUN FABLES
FOR NARRATOR AND ORCHESTRA

Three Fun Fables was commissioned by the Minnesota Orchestra for their Kinder Konzerts series and premiered in the 1996.97 season. It was originally written as an octet for clarinet, bassoon, contrabassoon, trumpet, trombone, violin, bass, percussion, and harp. The Philadelphia Orchestra commissioned the orchestration you will hear at our concert in 2000. There are three movements and each tells the story of a different fable. Fables are meant to convey a moral that is relatable and easy to understand. The fables in this suite are: “The Fox and the Crow,” “The Dog and His Reflection,” and “The Tortoise and the Hare.” Each character is represented by a different instrument and opposites like fast/slow, high/low, etc. are highlighted in the work.

I. The Fox and the Crow

“The Fox and the Crow” is a fable that teaches readers to beware of flattery. The fable begins with a crow stealing a piece of cheese from a flock of birds that had been picking on her. She flies off to her favorite tree to enjoy the cheese, bragging about her conquest. A nearby fox notices the crow as he is searching for breakfast. He sees the cheese in the crow’s beak and wants it for himself. The fox flatters the crow by complimenting her beauty and asking, “I wonder if you would sing for me, so I might hear your wonderful voice?” The crow opens her beak to sing and drops the cheese right into the fox’s mouth.

In the orchestra, the crow is played by the string bass and the fox is played by the trumpet. The string bass solo is extremely smooth and gentle when the crow is bragging about stealing the cheese. On the opposite end, the trumpet creates very energetic and harsh tones to depict the fox’s scheming. Specifically, the trumpeter uses the flutter tonguing technique to produce a growling effect in the sound. A dramatic change in the music can then be heard, portraying the sly charm of the fox.

II. The Dog and His Reflection

“The Dog and His Reflection” is about a hungry dog that goes into town searching for food. He ends up stealing a huge bone and runs away to the woods before the angry grocer catches him. On his way to the woods, he crosses a little bridge. Looking down into the stream he sees another dog who is also carrying a bone, not realizing it is his own reflection. The greedy dog decides he wants the other bone too and reaches down to grab it, but when he opens his mouth, he drops his bone in the water and is left with nothing. The moral of this fable is to be grateful for what you have and not greedy to receive more.

The trombone plays the character of the dog and the reflection is played by the violin and harp. The sound of the trombone has a flowing bounce to it that brings the dog to life. The crisply articulated accompaniment from the orchestra helps establish the dog’s journey through town. There are many special effects the instruments create to enhance the story, including when the dog loses his bone in the stream; the splash of the water is played by the cymbals.
III. The Tortoise and the Hare

“The Tortoise and the Hare” is a well-known fable about a race. The hare and tortoise cross paths in the forest and the hare makes fun of the tortoise’s appearance and his slow demeanor. The tortoise, indifferent to the insults, challenges the hare to a race. Surrounded by all of their forest friends, the two race off! The tortoise crawls along at his own speed while the hare takes off as fast as he can. He gets so far ahead, that no one is around to see him cross the finish line. He decides he will stop to eat a snack to wait for the tortoise and accidentally falls asleep. When the hare wakes up, he sees the tortoise has passed him and crossed the finish line, winning the race! This fable reminds us that “slow and steady wins the race.”

The clarinet, representing the hare, plays swift and elaborate patterns while the contra-bassoon, representing the tortoise, plays very low, elongated notes. These opposite musical effects make it easy to distinguish between the differing animals. The rest of the orchestra has a regal sound, personifying the race between the two characters.

LESSON PLANS: Three Fun Fables

Skill Outcome: Using “The Tortoise and the Hare” from Three Fun Fables, students will learn the tempos, adagio and allegro.

Strategies
1. Ask students what they know about tortoises and hares. What kind of animals are they? Where do they live? Have pictures of each animal to use as a visual aid.

2. Listen to “The Tortoise and the Hare.” What did students notice? What happened?

3. Discuss with students the speed of the animals in the story. Who was faster? How could you tell? Listen to the piece again and have students listen for the fast music of the hare and the slow music of the tortoise.

4. Explain to students that tempo is the speed of music. When music is fast, like the hare, it has a tempo musicians call “allegro.” When music is slow, like the tortoise, it has a tempo musicians call “adagio.”

5. Practice allegro and adagio by having students act like the hare (marching or running in place) when you say “allegro” and acting like the tortoise (slow motion) when you say “adagio.” Alternate playing allegro and adagio music samples for students to practice their tempo recognition.

6. Have students sing a song they are familiar with. (Examples: “Happy Birthday,” a song from a unit they know, etc.) Ask students how they would sing the song if it had an allegro tempo? How would they sing the song if it had an adagio tempo? Sing the song using both tempos.

7. Bonus: Challenge students to sing adagio or allegro, but only when you indicate for them to do so. Have a picture of the tortoise to represent adagio and a picture of the hare to represent allegro. Tell students to watch closely because after they start singing their familiar song at the normal tempo, you are going to show them the picture of the tortoise or the hare and they will have to change to singing adagio or allegro based on the picture.
Assessment:
Students will understand the tempos adagio and allegro and be able to demonstrate them through movement and singing.

Knowledge Outcome:
Using “The Dog and His Reflection” from Three Fun Fables, students will learn about fables and how they are designed to teach a lesson.

Strategies
1. Read the story, “The Dog and His Reflection” to students, but stop when the dog gets to the bridge and sees his reflection in the water.

2. Ask students to predict what is going to happen. Make a brainstorming web with all possible ending ideas students come up with. There is no wrong answer for this activity. Discuss which endings seem most likely. Why?

3. Finish the story. How did the actual ending compare with the predictions made?

4. Teach students that this story is a fable. Explain that fables are short stories that usually involve animals as the characters to teach a moral, or lesson. Help students understand the moral of “The Dog and His Reflection” that you should be grateful for what you have and not greedy to receive more. Did the dog learn his lesson? What other kinds of lessons could the dog learn?

5. Have students create their own ending for this fable that teaches the dog a lesson of their choosing. Examples: The dog realized stealing was wrong and returned the bone to the store owner. The dog shared the bone with all of his hungry friends and made them happy too. Etc.

6. Allow students to write their ending in one or two sentences and draw a picture that matches the lesson the dog learns in their narrative.

Assessment:
Students will be able to use context clues and inference skills to predict a story ending and write their own lesson or moral by creating an original ending for a fable.

Affective Outcome:
Using “The Fox and the Crow,” from Three Fun Fables, students will be able to recognize and relate the characters’ emotions in the fable to events in their own lives.

Strategies
1. Listen to “The Fox and the Crow.” Have students pay close attention to how each of the characters acts and might feel throughout the story.

2. Discuss with the students, “How do you think each character felt throughout the story?”

   a. Who is happy and sad throughout the story?

   b. Who was being nice or mean throughout the story?

   c. How would you feel if you were the crow? (or the birds or the fox?)
3. Create a map of the feelings for each character (the crow, the fox, and the birds). See the sample of the crow below:

<table>
<thead>
<tr>
<th>Character: The Crow</th>
<th>Feeling</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEGINNING</td>
<td>• Sad</td>
<td>• She was being picked on by the birds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The birds didn’t like her</td>
</tr>
<tr>
<td>MIDDLE</td>
<td>• Proud</td>
<td>• She successfully stole the cheese</td>
</tr>
<tr>
<td></td>
<td>• Special</td>
<td>• The fox was complimenting her</td>
</tr>
<tr>
<td></td>
<td>• Happy</td>
<td></td>
</tr>
<tr>
<td>END</td>
<td>• Embarrassed</td>
<td>• The fox had tricked her</td>
</tr>
<tr>
<td></td>
<td>• Sad</td>
<td>• She dropped the cheese</td>
</tr>
</tbody>
</table>

4. Discuss how the situations of the crow, the fox, and the birds are similar to events that could happen at school or in the lives of the students. Examples:
   a. The birds making fun of the crow is like a student getting picked on in the lunchroom because they might seem different.
   b. The crow taking the cheese from the birds instead of using her words to fix the problem is similar to a student getting bullied on the playground and retaliating by hitting the bully instead of telling an adult.
   c. The fox stealing from the crow is like a classmate taking something from you.
   d. Use any other situations you think are applicable for the students in your school.

5. Ask students how they might feel if they were a student in this situation? How can we prevent these situations? How do we keep students from feeling sad? How can we treat each other with respect and kindness?

Assessment:
- Students can relate their feelings, or the feelings of others, to characters in a fable.
- Students discuss ways to prevent situations that make other students, or themselves, feel sad.
CAMILLE SAINT-SAËNS (1835-1921)

Camille Saint-Saëns is considered one of the most talented musical prodigies of all time. He began music lessons as a toddler with his mother and great aunt Charlotte, who moved in with the family to teach piano. Saint-Saëns had perfect pitch, which means he could sing any musical pitch without prompting or name any pitch that he heard. His first composition is dated March 22, 1839, when he was three and a half years old. By age 10, Saint-Saëns was able to play all of Beethoven's 32 piano sonatas by memory—a talent he showed off by allowing audiences to choose which one they wanted to hear on the spot.

At the young age of 22, Saint-Saëns became the organist for the Church of the Madeleine in Paris and would stay there for 20 years. He additionally took on the role of professor of piano from 1861 to 1865 at the Niedermeyer School, teaching Gabriel Fauré and becoming dear friends. In 1871, Saint-Saëns helped found the National Society of Music with its purpose being to promote French orchestral works of great significance by the future generation of composers. In the same year he produced his first symphonic poem, Le Rouet d'Omphale (Omphale's Spinning Wheel). Along with Danse Macabre, Le Rouet d'Omphale is one of Saint-Saëns's most performed symphonic poems. Saint-Saëns toured extensively throughout his life, performing and conducting around the world. Some of his best works from later in his life include Le Carnaval des animaux (The Carnival of the Animals), Piano Concerto No. 5 and Cello Concerto No. 2. In addition to music, Saint-Saëns was a great intellectual writing poetry, scientific papers, and scholarly essays on music, history, and other topics. Additionally, he studied geology, archeology, and botany.

CARNIVAL OF THE ANIMALS

Carnival of the Animals was written in 1886, originally for a small ensemble of musicians. Saint-Saëns later re-wrote the work for full orchestra. The work contains fourteen movements, though he only allowed one of them (“The Swan,” or “Le Cygne”) to be published during his lifetime. The full work was not published or performed publicly until after the composer’s death. This was Saint-Saëns’s wish, as he did not want the light-hearted work to distract from his more serious compositions.
**Carnival of the Animals** premiered on February 26, 1922, just a few months after Saint-Saëns's death, and it quickly became one of his most famous works. Out of the fourteen movements, twelve of them describe animals. Saint-Saëns accomplished this by creating music for specific instrument families that imitated the sounds the animal makes or characterizes how the animal moves or carries itself. For instance, in the fifth movement, “The Elephant,” the low strings are used to represent the heaviness and weight of an elephant. Saint-Saëns was known for his musical sense of humor and readiness to poke fun at other composers. The eleventh movement pokes fun at the tedious **scales** a pianist uses to practice their craft. He also adapted popular musical references to participate in some of the animals’ portraits, the most noticeable example is in the fourth movement, “Tortoises.” The last movement is the **finale** and is the grand farewell of all the animals presented in the carnival.

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**I. Introduction and Royal March of the Lion**

The carnival opens with a royal march welcoming the King of the Jungle—the lion! A **tremolo** in the two pianos begins the royal welcome with members of the string family (violins, violas, cellos, and basses) joining in as the instruments collectively get louder. The two pianos play an overlapping **glissando** leading to a chord played by the strings before the royal fanfare begins. The fanfare is played by the pianos just like royal trumpets would play, followed by the strings with this **theme**:

![Sheet music for Introduction and Royal March of the Lion](image)

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**II. Hens and Roosters**

We transition from the jungle to the barnyard, hearing hens and roosters next. This theme in the piano, violins, and violas creates the pecking and clucking of the animals:

![Sheet music for Hens and Roosters](image)

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**III. Horses of the Tartary (Fleet Animal)**

The music used to help imagine this wild member of the carnival is played only by the two pianos. Saint-Saëns wanted to depict the donkey running rampant in its habitat. He achieved this image by marking the piece with a **presto tempo**.

![Sheet music for Horses of the Tartary](image)
IV. Tortoises

The tortoises, or turtles, are the next animals in the carnival. Saint-Saëns borrowed a piece from Jacques Offenbach’s operetta *Orpheus and the Underworld* and adapted it to create a musical joke. Offenbach’s piece, the “Can-Can,” is typically known for being a very fast dance with high energy. Saint-Saëns uses it uncharacteristically by slowing the piece to an andante tempo to portray the sluggish tortoise.

![Tortoise music notation]

V. The Elephant

In the fifth movement, Saint-Saëns uses the double basses to play the elephants’ theme as they come lumbering by. As another joke, Saint-Saëns decided to represent these giant animals with music that is defined as delicate and refined. The waltz is a beautiful dance usually performed in triple meter with an emphasis on beat one (1–2–3, 1–2–3).

The movement can be divided into three sections and follows an ABA form. This means that the first and last section of music are the same while the middle section is different. The A section melody shown below, sets a slow yet elegant pace for the elephants. The B section changes to more legato movements and a gentler sound, possibly stopping to swing their trunks.

![Elephant music notation]

VI. Kangaroos

The kangaroos make a short appearance in the carnival, hopping in and hopping right out again. Their music is only played by the pianos, which first gets faster and then slower. The ascending and descending staccato eighth notes, paired with grace notes, gives the feeling of the kangaroos hopping around.

![Kangaroo music notation]
VII. Aquarium

An aquarium isn’t an animal itself, but is full of animals - fish! This movement is one of the most beautiful of the carnival and uses the full orchestra. The melody is played by the flute and glass harmonica, often replaced by the celesta or glockenspiel, floating above beautiful glissando runs in the piano. This combination inspires the imagination to visualize an array of fish moving gracefully within the aquarium.

Flute

Celesta

DID YOU KNOW?

The glass harmonica was invented by Benjamin Franklin in 1761 and was inspired by water-tuned glasses. Glass bowls of varying sizes, arranged from largest to smallest, are fitted onto a metal rod that rotates by a foot pedal. To create the ethereal sounds, the player uses moistened fingers to graze the edges of the glasses.

VIII. People with Long Ears

In this movement, Saint-Saëns composed the music to imitate the sound the animal makes. It is the shortest movement of the carnival and is only played by two violins. The violins alternate playing short, high pitches to slurred low pitches. It has been speculated that this movement is meant to represent the critics of Saint-Saëns, another inside joke by the composer.
IX. The Cuckoo in the Depths of the Forest

Another new instrument makes an appearance in the orchestra to represent the sound of the cuckoo – the clarinet. The clarinet only plays these two notes in the entire movement:

When the cuckoo isn't singing its simple song, the pianos can be heard playing the music of the thick, beautiful forest.

X. Aviary

Just like “Aquarium,” an aviary is a place that is full of animals – birds! “Aviary” can be described as a scherzo because of its vigorous and playful qualities. The bird's song is imitated through swift, lighthearted playing by the flute that extends most of its range.

The strings and pianos of the orchestra provide a buzz of background noise from the aviary. The tremolos in the violins give the movement a sense of urgency, as if the birds are fluttering all around the aviary, while the pianos provide trills of other birds' songs.
XI. Pianists

Saint-Saëns had many piano students and created another joke in his carnival. The pianists aren’t playing a melody, but instead are imitating a beginning student practicing their scales. In the original score, a note from the editor is included that reads, “The pianists should imitate the hesitant style and awkwardness of a beginner.” The pianists play through four scales that are introduced with a trill before continuing through the full scale. Saint-Saëns chose the C Major scale to start the movement. It is the first scale taught to most beginning piano students because it contains no sharps or flats.

At the end of the scales, the strings chime in with a very loud chord marked with a marcato accent mark. It’s almost as if they are impersonating the teacher saying, “Again,” or “Next,” to the student. Saint-Saëns chose to end the movement in an unusual way. There is no resolution from the last three chords played, making it feel unfinished. Instead, it leads right into the next movement.

XII. Fossils

The xylophone makes its first appearance in the “Fossils” movement to evoke the image of dancing bones. Saint-Saëns has used the xylophone before to represent dancing bones in his symphonic poem Danse Macabre. The skeletons musical theme from Danse Macabre is featured as the main theme for the fossils.

Saint-Saëns used a lot of other familiar music in this movement including “Twinkle, Twinkle, Little Star” as well as French nursery rhymes “Au clair de la lune” and “J’ai du bon tabac.” The tunes can be heard primarily by both pianos and embellished by the other instruments.

XIII. The Swan

“The Swan” was the only movement from the suite Saint-Saëns allowed to be published during his life. It is one of the most well-known of the suite and is a staple of cello repertoire. The lavish cello solo represents the elegant swan gliding across the water. The two pianos join in, depicting the soft, flowing surface of the water. This is achieved through rippling sixteenths and arpeggiated chords in one piano and rolled chords in the other.
XIV. Finale

The finale is the triumphant parade of all the animals from the carnival. The full ensemble is used with embellishments by specific instruments from the movements. Although the melody is relatively simple, the surrounding harmonies, glissandi and trills show off Saint-Saëns’s ornate style.

LESSON PLANS: *Carnival of the Animals*

**Skill Outcome:**

Students will be able to identify and perform the musical motive from Saint-Saëns’s “Fossils.”

**Strategies**

1. Tell students, “Today we are going to become musical paleontologists! Does anyone know what a paleontologist is?”

2. A paleontologist studies the history of the earth by looking at fossils. Students will become musical paleontologists by searching for bones in Saint-Saëns’s “Fossils” movement from *Carnival of the Animals.*

3. Introduce students to the bones rhythm. A sample of the notated rhythm is shown below.

4. Using body percussion, have students echo the rhythmic motive one measure at a time. Eventually, students should be able to echo the entire rhythmic motive after you (just like the piano and strings in the movement).
   
   a. As a simplified version, have students only perform the quarter notes in the rhythmic motive.

5. Before listening to the movement, ask students for predictions on the following questions: “What sound do you think the bones will make?” “What instrument might represent the bones?”

6. Play the movement, prompting students to raise their hand when they hear the bones in Saint-Saëns’s movement.
   
   a. Bonus: If space allows, have students use their imagination to search around the room for the fossils in Saint-Saëns’s music. Each time students “find” bones in the music, they should start digging. When the bones disappear, students should continue to explore the room.
7. After the recording, tell students that Saint-Saëns chose the xylophone to represent the bones in his “Fossils” movement. (Show a picture of a xylophone or play one). Ask students why they think he chose this instrument? What about its sound makes the listener think of bones? Were their predictions right?

8. Perform the bones motive along with the recording, transferring to pitched or un-pitched instruments. If instruments cannot be used, perform with body percussion.

   a. It may be easier to have students echo the xylophone in the movement with the piano and strings. This will help students prepare for their entrance.

Assessment:

Following their performances, have students evaluate their skills as musical paleontologists:

| I used my instrument correctly –or- used body percussion appropriately: |
| Yes 😊 | Kind of 😐 | Not Really 😞 |

| I could hear the bones rhythm in the movement: |
| Yes 😊 | Kind of 😐 | Not Really 😞 |

| I was able to accurately perform the bones rhythm: |
| Yes 😊 | Kind of 😐 | Not Really 😞 |

Knowledge Outcome:

Students will compare musical ideas (high/low, fast/slow, etc.) in two contrasting movements of Saint-Saëns’s Carnival of the Animals.

Strategies:

1. Introduce students to Saint-Saëns and his work Carnival of the Animals using the resources listed in our guide or resources of your choosing. Do not share the specific animals of the suite.

2. Play “The Elephant” movement for your students. While they are listening, instruct the students to think of the animal Saint-Saëns might have been writing the music for. Students should be prepared to share their predictions and explain their reasoning. (You may want to play the movement a few times)

   a. Students may also draw a picture of the animal they have predicted.

3. Have students share the animals they guessed and why. Afterwards, reveal the animal the movement is about and discuss the reasons why an elephant fits the music: high/low, fast/slow, loud/soft, long/short, type of instrument, etc. Make a list of the observations on the board.

4. As a contrasting movement, have students listen to “The Aviary” and tell them the movement is about birds. Have students brainstorm ideas of what the movement might sound like. Write their answers on the board. How might the movement sound compared to “The Elephant?”

5. After listening, discuss what students heard and how the music sounded like that animal. Did their ideas on the board match what they heard?
6. Compare and contrast the two movements. How is the music alike? How is “The Elephant” different from “The Aviary?” Discuss tempo, dynamics, range, and instruments chosen by Saint-Saëns.

7. Introduce the two instrument families that represented the animals in the contrasting movements using Utah Symphony’s Instruments of the Orchestra videos. Discuss the sounds the instruments make and how they represented the sounds heard in their observations of the movements.
   a. The Bass in the Orchestra (Start at 3:32):
      [link]
   b. The Flute in the Orchestra (Start at 2:00):
      [link]

Assessment:

Students can successfully identify and describe musical opposites used in “The Elephant” and “The Aviary” movements from Saint-Saëns’s Carnival of the Animals.

Affective Outcome:

Students will move in response to two contrasting movements from Carnival of the Animals.

Strategies:

1. Play the “Aquarium” movement from the suite. Without sharing the animal, have students move to the music. Stop the recording at 0:47.
2. Play the “Hens and Roosters” movement from the suite. Without sharing the animal, have students move to the music.
3. Have a discussion with the students on the different movement choices they made for the two movements. Have students describe why they moved differently.
4. Tell students that each movement of the Carnival of the Animals suite represents a different animal. Based on what they’ve heard so far, ask students what animal they think each movement is about. Play the movements again for students to listen to, if necessary.
5. Reveal that the first animals are fish in an aquarium and the second animals are hens and roosters. Discuss how fish move and how it feels to move through water. Discuss how hens and roosters move. How are the two animals’ physical movements different? How can you tell they are different from the music?
6. Listening to the movements again, have students move through the ocean as a sea creature of their choosing in “Aquarium” and peck around the chicken coop in “Hens and Roosters.”
BONUS: Fish and Seaweed Activity

- Divide the class in half; one half being fish and the other being seaweed.
- Those that are seaweed will pick a stationary spot in the room.
- The fish will gently move around the room and maneuver around the seaweed.
- If a fish passes a seaweed, the seaweed must respond to the movement of the fish. Their feet must stay planted on the ground.
- After the movement finishes, have students switch roles.
- At the end, have students share if they liked being fish or seaweed better.

Assessment:

Students demonstrate an understanding of contrasting musical pieces through body movement.

Danceworks

Founded in 1992, the mission of Danceworks, Inc., a 501(c)3 nonprofit, is to enhance the joy, health and creativity of the community through performances, classes and outreach activities that integrate dance and other art forms. Danceworks’ vision is to be the driving force that connects creativity and community through dance and the other arts. Danceworks’ resident professional contemporary dance company, Danceworks Performance Company (DPC) is a dynamic group of dancers/choreographers that is committed to creating and performing contemporary dance that is physical, virtuosic, entertaining and honest. Collaboration fuels the creative vision of the company members as they regularly work alongside guest artists including musicians, poets, visual artists, actors and choreographers. DPC strives to make its work relevant and accessible to a wide range of audience members by regularly performing and teaching workshops and residencies in diverse communities throughout southeastern Wisconsin.

For more information about these and other offerings from Danceworks, please visit their website: www.danceworksmke.org.
Print and Online Resources

Instruments and the Orchestra


Utah Symphony/Utah Opera Instruments of the Orchestra Video Series (short videos profiling musicians and their instruments in the orchestra). [https://www.youtube.com/playlist?list=PLALV7z7CDQ7yCWoOvUK4mOMAE4ub_h0TG](https://www.youtube.com/playlist?list=PLALV7z7CDQ7yCWoOvUK4mOMAE4ub_h0TG)

Composers, Pieces, and General Background


San Francisco Classical Voice website. Biography includes a biographical outline and fun facts of Saint-Saëns: [https://www.sfcv.org/learn/composer-gallery/saint-sa%C3%ABns-camille](https://www.sfcv.org/learn/composer-gallery/saint-saëns-camille)

*Three Fun Fables*, Daniel Dorff


Program Notes by the composer. Contains audio excerpts of the different animals in the suite: [http://www.danieldorff.com/pn-3ff.htm](http://www.danieldorff.com/pn-3ff.htm)

Walt Disney Silly Symphony-The Tortoise and the Hare: [https://www.youtube.com/watch?v=2DrKmpuKhKE](https://www.youtube.com/watch?v=2DrKmpuKhKE)

*Carnival of the Animals*, Camille Saint-Saëns


*Carnival of the Animals* Finale. Fantasia 2000. Movie: [https://www.youtube.com/watch?v=xjmI0D-uoLo](https://www.youtube.com/watch?v=xjmI0D-uoLo)
**Glossary**

**Accompaniment:** Instrumental or vocal parts that support a more important part.

**Andante:** Musical direction indicating that a piece is to be played at a moderately slow tempo.

**Beat:** The unit of musical rhythm.

**Cadence:** A sequence of notes or chords comprising the close of a music phrase.

**Chord:** Three or more musical notes played at the same time.

**Classical Era or Period:** The time in music history from the early-1700s to early-1800s. The music emphasized the use of formal structures while offering variety and contrast within a piece. Composed works were expressive and polished, with clearer divisions between sections and lighter textures.

**Commission:** A contract to pay a composer to write a new piece of music.

**Compose:** The act of writing music.

**Composer:** A person who writes music.

**Composition:** An original piece of music.

**Concertmaster:** The first violin in an orchestra.

**Concerto:** A composition written for a solo instrument and orchestra. The soloist plays the melody while the orchestra plays the accompaniment.

**Conductor:** One who directs a group of performers. The conductor indicates the tempo, phrasing, dynamics, and style with gestures and facial expressions.

**Crescendo:** A gradual increase in loudness.

**Duration:** The time that a sound or silence lasts, represented by musical notes and rests with fixed values with respect to one another and determined by tempo.

**Dynamics:** Loudness or softness of a composition. The symbols in sheet music indicating volume.

**Ensemble:** A group of two or more musicians.

**Excerpt:** A smaller musical passage taken from a larger movement or work.

**Finale:** Movement or passage that concludes the musical composition.

**Flat:** A symbol showing that the note is to be lowered by one half-step.

**Flutter Tongue:** A wind instrument technique where the musician rolls or trills their tongue while playing.
<table>
<thead>
<tr>
<th><strong>Glossary</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Form:</strong> The structure of a piece of music.</td>
</tr>
<tr>
<td><strong>Forte:</strong> A dynamic marking indicating to play loud.</td>
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<tr>
<td><strong>Genre:</strong> A category that identifies a piece of music as belonging to a certain style or tradition.</td>
</tr>
<tr>
<td><strong>Glissando:</strong> Indicating a musician to perform a sliding effect from one note to another.</td>
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<tr>
<td><strong>Grace Notes:</strong> An ornamental note, used as an embellishment before the beat.</td>
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<tr>
<td><strong>Harmony:</strong> The pleasing combination of two or three pitches played together in the background while a melody is being played. Also refers to the study of chord progressions.</td>
</tr>
<tr>
<td><strong>Instrumentation:</strong> Arrangement of music for a combined number of instruments.</td>
</tr>
<tr>
<td><strong>Key:</strong> The system of notes or pitches based on and named after the key note.</td>
</tr>
<tr>
<td><strong>Key Signature:</strong> The flats and sharps at the beginning of each staff line showing the key of music the piece is to be played.</td>
</tr>
<tr>
<td><strong>Legato:</strong> Indicating a musician to perform in a smooth, flowing manner, without breaks between notes.</td>
</tr>
<tr>
<td><strong>Leitmotif:</strong> A recurrent theme throughout a musical or literary composition, associated with a particular person, idea, or situation. Translates from German as “leading motive.”</td>
</tr>
<tr>
<td><strong>Marcato:</strong> An articulation marking indicating to play with emphasis.</td>
</tr>
<tr>
<td><strong>Major:</strong> One of two modes of the tonal system. Music in major keys has a positive, affirming character.</td>
</tr>
<tr>
<td><strong>Melody:</strong> A succession of pitches in a coherent line, the principal part.</td>
</tr>
<tr>
<td><strong>Minor:</strong> One of two modes of the tonal system. Can be identified by a dark, melancholic mood.</td>
</tr>
<tr>
<td><strong>Motif/Motive:</strong> Primary theme or subject.</td>
</tr>
<tr>
<td><strong>Movement:</strong> A separate section of a larger composition.</td>
</tr>
<tr>
<td><strong>Natural:</strong> A symbol showing that the note is returned to its original pitch after it has been raised or lowered.</td>
</tr>
<tr>
<td><strong>Notation:</strong> The methods of transcribing music into print.</td>
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<tr>
<td><strong>Octet:</strong> A composition for eight performers.</td>
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<tr>
<td><strong>Opus:</strong> A musical work, abbreviated to OP, often used with a number to designate a work in its chronological relationship to a composer’s other works.</td>
</tr>
<tr>
<td><strong>Orchestra:</strong> A large group of instrumentalists playing together.</td>
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<tr>
<td><strong>Orchestration (v. orchestrate):</strong> Arranging a piece of music for an orchestra.</td>
</tr>
<tr>
<td><strong>Piano:</strong> A dynamic marking indicating to play softly.</td>
</tr>
<tr>
<td><strong>Pitch:</strong> The frequency of a note determining how high or low it sounds.</td>
</tr>
<tr>
<td><strong>Premiere:</strong> The first official performance of a work.</td>
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<tr>
<td><strong>Presto:</strong> Musical direction indicating that a piece is to be played at a very fast tempo.</td>
</tr>
<tr>
<td><strong>Prodigy:</strong> A person, especially a young one, endowed with exceptional qualities or abilities.</td>
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<tr>
<td><strong>Program Music:</strong> Music that is descriptive, narrative, or that develops a nonmusical subject.</td>
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<tr>
<td><strong>Publish:</strong> To issue for public distribution.</td>
</tr>
<tr>
<td><strong>Quartet:</strong> A set of four musicians who perform compositions written for four parts.</td>
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<tr>
<td><strong>Repertoire:</strong> A collection or body of standard works performed regularly.</td>
</tr>
<tr>
<td><strong>Rhythm:</strong> Pertaining to time, played as a grouping of notes into accented and unaccented beats.</td>
</tr>
<tr>
<td><strong>Romantic Era or Period:</strong> The time in music history during the mid-1800s to early 1900s. Composers explored new realms of sounds to convey originality and individuality. The music was characterized by an emotional, expressive, and imaginative style.</td>
</tr>
<tr>
<td><strong>Scale:</strong> Any set of musical notes ordered by pitch.</td>
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<tr>
<td><strong>Score:</strong> The depiction, often in book or bound form, of a musical work containing all the parts stacked vertically and rhythmically lined up.</td>
</tr>
<tr>
<td><strong>Sharp:</strong> A symbol showing that the note is to be raised by one half-step.</td>
</tr>
<tr>
<td><strong>Slur:</strong> Indicating a musician to glide over a series of notes smoothly without a break.</td>
</tr>
<tr>
<td><strong>Solo:</strong> Music performed by only one instrument or voice. (N. Soloist: The person performing the solo line.)</td>
</tr>
</tbody>
</table>
**Sonata:** Music of a particular form consisting of four movements. Each movement differs in tempo, rhythm, and melody but they are bound together by subject and style.

**Staccato:** Indicating a musician to perform each sound with sharp, detached breaks between notes.

**Staff:** Five horizontal, parallel lines and spaces between them on which musical notation is written.

**Suite:** A collection of short musical pieces meant to be played one after another.

**Symphonic Poem (tone poem):** An instrumental composition intended to portray a particular story, scene, or mood.

**Symphony:** Three to four movement orchestral piece, generally in sonata form.

**Tempo:** Indicating speed.

**Texture:** The way in which tempo, melody and harmony are combined in a composition that determines the overall quality of the sound in a piece. Often described in relation to density as thick or thin or in relative terms such as by the number of parts or voices present.

**Theme:** A melodic or sometimes harmonic idea presented in a musical form.

**Timbre:** The quality that makes a particular musical sound have a different sound from another, even when they have the same pitch and loudness.

**Time Signature:** Numeric symbol in sheet music determining number of beats per measure.

**Tone:** A note or pitch. Also, the quality and character of sound.

**Tremolo:** A wavering effect in a musical tone, created by rapid repetition of a pitch.

**Trill:** Rapid alternation between a note and another half step or whole step above.

**Waltz:** A type of dance music written in triple meter.
Education Department

Through a wide variety of programs and initiatives, the MSO Education Department reaches out to all music lovers. In addition to Concerts for Schools, the MSO Education Department offers the following programs:

Arts in Community Education (ACE)

In its 29th year, the nationally recognized ACE program integrates arts education into state-required curricula, providing arts opportunities for students to enhance their complete learning experiences. Classrooms receive three visits per year by ensembles of MSO musicians and local artists as well as lesson plans and supporting materials. In addition, ACE students attend MSO concerts tailored to each grade level. This season, more than 7,300 students and 500 teachers from 20 area elementary and K-8 schools will participate in ACE.

The Bach Double Violin Concerto Competition is part of the ACE program. Student violinists in 8th grade and younger can audition to play part I or II of Bach’s Double Violin Concerto. Multiple winners are chosen per part to perform with the MSO on an ACE concert each spring. This season’s competition will take place on February 9, 2019. Contact the Education Department at 414.226.7886 or edu@mso.org for more information.

Family Concerts

MSO Family Concerts are a perfect way for the entire family to enjoy the MSO. Programs capture the attention and imagination of children ages 3 to 10. Forte, the MSO Volunteer League, provides free pre-concert activities, including an instrument “petting zoo” and arts and crafts. Concerts begin at 2:30 pm with pre-concert activities beginning at 1:30 pm.

- Saturday, December 1, 2018 at Uihlein Hall: The Snowman: Film with Orchestra
- Sunday, March 31, 2019 at Uihlein Hall: Presto Mambo featuring Platypus Theatre

Audrey G. Baird Stars of Tomorrow Auditions and Concert

In partnership with Forte, the MSO Volunteer League, the Stars of Tomorrow Auditions are an annual concerto competition open to all high school-aged strings, woodwind, brass, and percussion musicians in the state of Wisconsin. Three finalists are chosen and compete for the top prize at the Audrey G. Baird Stars of Tomorrow concert. Scholarships are awarded to the finalists and winner. Honorable mentions from the auditions also perform side-by-side with the MSO for the Stars of Tomorrow concert.

The 2019 Stars of Tomorrow Auditions will be held on February 23, 2019. The 2019 Audrey G. Baird Stars of Tomorrow concert will be held on May 9, 2019. For more information and to receive an audition application, please contact the Education Department at 414.226.7886 or edu@mso.org.

Teen Choral Partners

Each year, high school choirs are chosen to perform a choral masterwork with the MSO on the Concerts for Schools Teen Series. Choirs submit an application and audio recording in the spring and are chosen by blind audition. The 2019-20 Teen Choral Partners application will be available in the spring of 2019. Applications and audition recordings will be due in June, 2019.

Educator’s Night

With the Civic Music Association, the MSO hosts Educator’s Night at one Classical Subscription concert each season. The CMA presents its annual awards to outstanding educators in music from the greater Milwaukee area. All educators can receive discounted tickets to this performance, which will be held on March 30, 2019. Contact the Education Department at 414.226.7886 or edu@mso.org for more information.
2018.19 Milwaukee Symphony Orchestra

**MUSIC DIRECTOR**
Polly and Bill Van Dyk Music Director Chair

**EDO DE WAART**
Music Director Laureate

**YANIV DINU**
Associate Conductor

**CHERYL FRAZES HILL**
Chorus Director
Margaret Hawkins Chorus Director Chair

**TIMOTHY J. BENSON**
Assistant Chorus Director

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Charles and Marie Caestecker
Concertmaster Chair
Ilana Setapen, Associate Concertmaster
Jenny Kim, Associate Concertmaster
Third Chair
Alexander Ayers
Michael Giacobassi
Yuka Kadota
Dylana Leung
Chi Li
Liija Phang
Margot Schwartz
Karen Smith

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Woodrow and Andrea Leung
Principal Second Violin Chair
Timothy Klabunde, Assistant Principal
Glenn Asch
John Bian
Lisa Johnson Fuller
Paul Hauer
Hyewon Kim
Shengnan Li
Laurie Shawger
Mary Terranova

**VIOLAS**
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Richard D. and Judith A. Wagner
Family Principal Viola Chair
Nicole Sutterfield, Assistant Principal
Friends of Janet F. Rugger Viola Chair
Samantha Rodriguez, Assistant Principal
Third Chair
Elizabeth Brelin
Alejandro Duque
Nathan Hackett
Erin H. Pipal
Helen Reich

**CELLOS**
Susan Babini, Principal
Dorothy G. Mayer Cello Chair
Scott Tidel, Associate Principal Emeritus
Kathleen Collisson
Madeleine Kabat
Gregory Mathews
Peter Szapaneck
Peter J. Thomas
Adrien Zouan

**BASSES**
Jon McCullough-Benner, Principal
Donald B. Albert Bass Chair
Andrew Raciti, Associate Principal
Scott Kreger
Catherine McGinn
Rip Prétat
Laura Snyder

**FLUTES**
Sonora Slocum, Principal
Margaret and Roy Butler Flute Chair
Heather Zinninger Yarmel, Assistant Principal
Jennifer Bouton Schaub

**PICCOLO**
Jennifer Bouton Schaub

**OBES**
Katherine Young Steele, Principal
Milwaukee Symphony Orchestra League Oboe Chair
Kevin Pearl, Assistant Principal
Margaret Butler

**ENGLISH HORN**
Margaret Butler, Philip and Beatrice Blank English Horn Chair
in memoriam to John Martin

**CLARINETS**
Todd Levy, Principal
Franklyn Eustein Clarinet Chair
*Benjamin Adler, Assistant Principal
Donald and Ruth P. Taylor Assistant Principal Clarinet Chair
**JJ Koh, Acting Assistant Principal
William Helmers

**E FLAT CLARINET**
*Benjamin Adler
**JJ Koh, Acting

**BASS CLARINET**
William Helmers

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Catherine Chen, Principal
Muriel C. and John D. Silber Family Bassoon Chair
Rudi Heinrich, Assistant Principal
Beth W. Giacobassi

**CONTRABASSOON**
Beth W. Giacobassi

**HORNS**
Matthew Annin, Principal
Krause Family French Horn Chair
Krystof Pipal, Associate Principal
Dietrich Hemann

**TRUMPETS**
Matthew Ernst, Principal
Walter L. Robb Family Trumpet Chair
David Cohen, Martin J. Krebs
Associate Principal Trumpet Chair
Martin J. Krebs, Acting Principal Trumpet Chair
Alan Campbell
Fred Fuller Trumpet Chair

**TROMBONES**
Megumi Kanda, Principal
Marlene Tiefenbrunn Trombone Chair
Kirk Ferguson, Assistant Principal

**TUBA**
*Randal Montgomery, Principal
**Matthew Gaunt, Acting Principal

**TIMPANI**
Dean Borghesani, Principal
Christopher Riggs, Assistant Principal

**PERCUSSION**
Robert Klieger, Acting Principal
Christopher Riggs

**PIANO**
Melissa S. Pick Endowed Chair

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Rip Prétat, Assistant Librarian

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**PRODUCTION STAGE MANAGER**
Amy Langenecker

**PRODUCTION TECHNICAL MANAGER**
Tristan Wallace

*Leave of Absence 2018.19 Season
** Acting members of the Milwaukee Symphony Orchestra 2018.19 Season

String section members are listed in alphabetical order