

*Raven Hill Discovery Center is a 501(c)(3) tax-exempt corporation.*

**Mission:** Raven Hill provides a place that enhances hands-on and lifelong learning for all ages by connecting science, history & the arts.

To: Friends and Family everywhere  
From: Cheri and Raven Hill  
Date: December 12, 2020  
Re: Updates from Raven Hill!

Greetings, Everyone!

Plato put it simply, when he said, "music gives a soul to the universe, wings to the mind, flight to the imagination, and life to everything."

The sounds of music exist inside & out at Raven Hill. Music continually exemplifies the Center's mission to enhance hands-on and lifelong learning for all ages by connecting science, history and the arts. The marimba, a type of xylophone, is a perfect example of those connections. The instrument has its roots in 14<sup>th</sup> century Africa. The beautifully woodworked keys are struck with mallets to create wonderfully soft and mellow musical tones. The different notes are dependent on such things as the thickness and density of the wood. The marimba keys have a kerf carved underneath in the middle. The vibrations have to slow down & squeeze through the thinner middle part of the bar, thus lowering the pitch...science, history and art.



This aspiring musician takes delight in the keyboard. Now may be just the time for **you** to pick up an instrument & learn something new.



Here's a novel way to play the marimba! Older children, who are taking piano lessons, can pick out tunes without a moment's hesitation!



Jim Doble sent this whale drum all the way from Maine. You can feel the drum beats, as the vibrations travel through the ground and up into your feet.

In 2009, the Earth Tones Music Garden was built at Raven Hill with a grant award from the Michigan Council for Arts and Cultural Affairs that was matched by funds from local community organizations and individuals. Most of the musical instruments were designed and constructed by musician, Tom Kaufmann. Tom poured his heart and soul into building tuned instruments of wood, metal, stone and plastic.

The orange whale drum is the end of a recycled propane tank. The cut metal tongues vibrate to generate sound. Zane Thomas and Hannah David, Raven Hill summer staffers, helped Tom assemble the lithophone made from granite countertop. Tom used 2x4 lumber to fashion the amadinda xylophone and the mushroom bells are old oxygen tanks. Other instruments include triangles, frictions rods, an earth harp, slap tubes and a brake drum metallophone.



For most of 2020, the Earth Tones Music Garden has remained silent, save for a few summer visitors exploring the grounds.

Recently, Tom recalled constructing the Music Garden. "I had no idea how much the project would change my life. If Raven Hill hadn't asked me to build a lithophone, I'm quite certain that I wouldn't have become one of the nation's only lithophone makers. I wouldn't have provided stone instruments for museums and science gardens around the world. If the Center hadn't asked me to make bells from recycled oxygen tanks, I wouldn't have made my "KinderBells", which are found many places locally and beyond. I love the Center's passion and dedication to education and I am so grateful to be a part of it. Raven Hill knows how to tickle one's curiosity. It made me want to know more about the stuff that fascinates me."

The Summer Magic Fundraiser in 2009 included a wonderful concert in the new Earth Tones Music Garden. Tom Kaufmann played keyboard, Ken Chubb the drums and special guest, Jim Cooper the vibraphone and the Music Garden instruments. Robin Lee Berry sang and a couple members of the Petoskey Steel Drum Band also performed for guests. It was quite the evening.

As kids, we would ask my dad what instrument he played and he would always answer that he played the radio! He actually might have played a portable radio, like the one pictured below. A magazine ad from the 1930's featured this radio. It promised

you could "now have music in your hotel room or on the train." The Communications Timeline in Raven Hill's Evolving Technology (ET) Building contains various machines for recording or playing music. There are drums, a didgeridoo, radios, cylinder and flat record players, a working Edison Victrola and a television from 1949 for watching The Ed Sullivan Show with all its musical guests.



Glenn Hindbaugh holds up the antenna of a 1930's era "portable" radio, demonstrating an early "boom box".



John Clements & Mike Rupert test out the Edison Victrola for the technology timelines.



In the compound word "lithophone", the word "phone" comes from the Greek word for "sound" and "litho" means "stone". Who knew?!



A one, and a two, and a three... Musicians prepare to perform, playing their own instruments & the recycled, tuned instruments in Raven Hill's outdoor Music Garden.

Author Bryce Anderson shared this, "I've found that no matter what life throws at me, music softens the blow." So, put on your favorite tune and do a little dance. Let COVID drift away in the music – if only for a few moments. Meanwhile, wear your mask, socially distance and wash your hands. Text or call anytime. My cell is 231.675.6025 or you can email me—

[cheri@miravenhill.org](mailto:cheri@miravenhill.org) Hugs, Cheri