



# Wild Music

Sounds & Songs of Life



## Wild Music: a walk through the exhibition

As visitors enter the 4,000-square-foot exhibition, they encounter a series of rich sound experiences that invite exploration and participation. Intriguing sounds and the play of dappled light on walls and floors draw them into the first of **three immersive environments**. Here, in an area suggestive of a **forest's edge**, they can hunt for sounds of forest creatures and explore exhibits about birdsong and soundscapes (the acoustical equivalent of a biome).

Beyond, they glimpse the rippling light of an **underwater environment**, which draws them on to investigate the songs of whales—resembling human song, they learn, in their phrasing, rhythm, and variations on basic themes. A hydrophone, used in studying whale song, can be lowered into a tank of water, where it amplifies sounds like a throbbing engine.

On the way to the oceanscape, visitors pass through a **city square**, where human sounds predominate, and they can stop to record a musical memory and watch those others have shared.. In the **Jamming Room**, a soundproof studio, they can lay down a beat, add tracks with animal sounds and songs, and finish with their own voice or instrumental playing.

Nearby, a **bioacoustics laboratory** invites visitors to explore sound and song more closely, through a series of experiences—a touchable spectrum analyzer, working models of a human larynx and bird syrinx, and experiments with resonance and source/filter theory.

Finally, visitors can choose to enter a small **theater** where they settle in to experience a short film on the **power of sound and song**, across species, to help us bond, to work together, and to grieve.

The exhibition was “composed” with the assistance of environmental sound artist Philip Blackburn to create an **overall sound composition** that is pleasing, not the usual cacophony of separately conceived sounds. Accessibility is featured throughout in tactile experiences, Braille and acoustical labels, and careful attention to the requirements of wheelchair users. Exhibit materials, selected for their low environmental impact, include translucent walls made of recycled plastic with embedded plant material, bamboo and sorghum board, carpet with recycled content, low VOC paints, and LED lights. The exhibition has also been designed to keep shipping to a minimum to hold down costs and carbon emissions.

### Other highlights:

- **Parabolic Microphone**—Using a microphone with a parabolic reflector (the kind used by nature recordists), visitors pick out faint sounds in the soundscape from a variety of birds, insects, squirrels, and distant human activities.
- **Thrush Songs**—Thrushes seem to those of us living in Europe and North America among the finest of bird singers. Visitors can listen to songs from four thrush species, slowing the songs to hear them more clearly.



- ▣ **Pictures of Sound**—A sonogram is a 3-D picture of a sound with time progressing along the x-axis, frequency (or pitch) represented along the (up-and-down) y-axis, and volume represented by the color or thickness of the graph. In this exhibit, visitors place tactile sonogram cards of various animals on a player and follow the picture as the animal vocalizes.
- ▣ **Touchable Sound**— Visitors use a set of tactile, vibrating metal reeds to investigate the richness of the sound mix of musical instrument tones, animal cries, and their own voice.
- ▣ **Human Voice/Bird Voice**—Visitors experiment with working, large-scale, physical and anatomical models of a human larynx and the two-vibrator syrinx of a bird, which has two pairs of vibrating membranes that allow birds to sing fast trills or two notes at once.
- ▣ **Electronic Voices**— Visitors learn about the source/filter theory of vocal sound production by using an electrolarynx to make vowel sounds with hollow “throat and tongue” models while watching sound pictures on an oscilloscope and sound spectrograph.
- ▣ **Born Musical**— Visitors engage in a computer-facilitated experiment in which they learn what scientists have discovered: that all of us are born with the capacity to discriminate pitch and rhythm.
- ▣ **Music and Memory**—Visitors listen to songs from across species, genres, and generations. They can then record their own most engaging musical memories for others to watch.
- ▣ **What *Is* Music?**—Browsing this wall of images and videos, visitors may choose to hear from a variety of scientists, ethnomusicologists, and composers about how their field defines “Music” and offer their opinion on whether or not their definition extends to sounds animals make by leaving written comments.
- ▣ **Instruments from Nature**—Throughout the exhibition, dispersed in small niches and vitrines, visitors see, hear, and sometimes touch instruments inspired by natural materials and forms.

