



photo-Dave Myers

The Role of Quiet in Our Health and Habitats

by *Jessica Aiello*

You find the perfect spot—a clear, babbling stream. You cast your line, you stand and wait. Suddenly, the silence is disturbed by the sound of loud voices. There goes that record-setting trout. Unfortunately, quiet time in nature is becoming more difficult to find. In *The Nature Fix*, Florence Williams writes that “Noise may well be the most pervasive pollutant in America.” Human-created noise pollution not only negatively impacts our outdoor experiences, but it can also be a hazard to our health. Thankfully, some things can be done to enhance the soothing sounds of nature while minimizing unwanted noise.

What too much noise does to us

Multiple studies show that prolonged exposure to too much noise (defined as greater than 55 decibels at night or 65 decibels during the day by the World Health Organization) can lead to heart attacks and strokes, among other health impacts. Even reading comprehension, memory, hyperactivity and quality of sleep can be negatively impacted by too much human-created noise.

“When we hear a negative sound, our body responds to that as a potential threat,” said Joshua Smyth, a biobehavioral health psychologist and professor with Pennsylvania State University. “We will respond as if we are becoming stressed. This is the ‘fight or

flight’ response. This can disrupt a moment of calm, but it can, over time if that happens frequently, even create a situation where the body perceives it as chronically stressful. If that happens too frequently or for too long a period of time, we can become, in essence, exhausted.”

Fish and other wildlife are also negatively impacted by too much noise. They can have trouble finding mates, have difficulty staying asleep, which affects their health and ability to avoid predators, and suffer from the same trickle-down health effects caused by too much stress, like a compromised immune system. Research discussed in the American Association for the Advancement of Science noted that there is some evidence that fish don’t school well in noisy environments and avoid areas where man-made noise is high. That can cause fish to avoid key spawning sites or alter their migration routes. Too much noise can also mask natural sounds that are important to fish such as the sounds produced by approaching predators or prey. The National Park Service defines masking as the process by which the ability to hear a sound is reduced by the presence of another sound. They use the example of how smog limits our ability to see a landscape, so too does a loud car noise alter our ability to hear a bird singing or a brook babbling.

That is why the Pennsylvania Parks and Forests Foundation (PPFF) developed a new video, “The Role of Quiet,” which dives into how the pleasant sounds of nature enhance our time outdoors and how we can overcome the threats from too much human-created noise through some simple solutions.



photo-Suzanne Enos

How the sounds of nature nourish us

The sounds of nature help in stress recovery, cognitive function and emotional health improvement according to research published in the article, “Ecosystem Services Enhanced through Soundscape Management Link People and Wildlife” in the journal *People and Nature*. Peter Newman can attest to that. Newman is the department head and Martin Professor of Recreation, Park, and Tourism Management at Pennsylvania State University and is featured in PPF’s “The Role of Quiet” video. His research looks at the positive human health impacts that come from hearing the sounds of nature including how being exposed to those sounds can improve the rate of restoration after a stressful event.

“Instead of taking an aspirin, take a forest or take a park,” said Smyth, “and those walks or those sits in those spaces can absolutely be restorative.”

How we can be stewards of quiet

Many anglers have always been quiet aficionados. After all, silence and stillness are generally required for a successful fishing trip. However, not every outdoor enthusiast is so perceptive when it comes to the noise they may be making. That is why PPF offers a few easy suggestions to reduce noise, so everyone can benefit from quiet.

Use earbuds or headphones when listening to music or try going without music and listening to nature instead.

- When paddling, use quiet strokes. Be cognizant of other users nearby—both anglers and boaters.
- Turn off your cell phone. If you must have it on, set it to vibrate instead of ring.
- Use your inside voice.

You can also seek out high-quality natural soundscape areas, of which there are many in Pennsylvania, to enjoy time outdoors.

“Pennsylvania is fortunate to have 124 state parks and 20 state forests that are open to residents and visitors alike for quiet fishing and paddling opportunities,” said Marci Mowery, President, Pennsylvania Parks and Forests Foundation. “The peace and relaxation we gain from quiet time in nature is invaluable. That is why we must work together and remain diligent to protect these special places from noise encroachment. As our new video points out, both humans and wildlife need quiet for optimum health.”

For more information:



PaParksAndForests.org



dcnr.pa.gov/Recreation/WhatToDo/Fishing/Pages/default.aspx

The Role of Quiet:



youtube.com/watch?v=mQwXLJRHEqA