

The Art of Capturing Natural Audio by Dan Bertalan

Outdoor television programs, video productions, radio programs and many interactive websites would be as dead as last years' salmon run without quality, supportive natural audio. Yet despite its vital role in almost every aspect of higher-end outdoor media production today, it remains one of the most overlooked and abused aspects of making outdoor media come alive. And having a quality library of natural sounds can sometimes separate both you and your productions from the competition.

What's Nat Sound?

Natural audio (nat audio) is the combination of the natural sounds that occur in an outdoor environment. It can include ambient wind noise as moving air contacts leaves, tree branches and a variety of surfaces. Nat audio commonly also contains bird sounds, insect background and intermittent animal sounds such as bugling elk or chattering squirrels. It can even include other sounds in nature such as rushing or lapping water, thunder, rain or even sleet.

Although some might consider all outside sounds as part of the "natural audio" world, the true sounds of *nature* are more often than not contaminated with a host of human related sounds that degrade its essence and production value of the audio. Unless you're recording in the wilds of the Yukon or the heart of Africa, nat audio is often degraded by passing airplanes, distant traffic, barking dogs, chainsaws, gunshots, ATVs, watercraft, construction pounding, marching bands, yelling kids, you name it.

More often than not, natural audio is captured serendipitously as part of some grander enterprise such as videotaping a television show or video production. And because it's "background" audio to another prominent event involving people, it's also "contaminated" with camera operator motion and voice sounds and talent sounds. Of course, some of those sounds are not only unavoidable but crucial to the overall production. However, knowing how to minimize contamination from all sources and how to maximize the capturing of uncontaminated audio is the art of capturing nat audio that can boost the quality of a production while helping make it seamless.

Tools of the trade

Many digital cameras and recorders come with built-in mics that are designed to capture audio – at birthday parties with screaming kids. Most built-in mics are attached to the housing of the camera and are extremely vulnerable to also recording camera motor noise and camera operator generated noise, especially if left up to the "audio brain" of the camera. True, some higher end cameras today have quality, cushioned mics designed to mitigate camera noise, but again they are at the mercy of the camera's audio settings. To overcome some of the challenges with gear, follow these simple cures:

- Use a quality shotgun mic instead of the built-in mic. If your shotgun mic has various settings, use the "normal" and not the "tele" or high setting. You'll capture too much white noise and fuzzy ambience. If your camera already has a quality shotgun style mic that is somewhat segregated from the camera body, that's fine. Just be sure you set the volume manually for the softer tones of capturing nat sound.

- Use headphones. Most audio glitches on field tapes can be attributed to not wearing headphones and assuming everything is fine with the audio that's being recorded. Using headphones and watching your audio meter (if your camera has one or more) will allow you to adjust the manual setting on the audio to capture just the right amount of natural audio without introducing white noise. Leaving the setting on "auto" will allow the camera to automatically boost the audio setting because it wants to hear something in the -20db range. Most nat audio is far below that range so the camera will automatically boost the setting so high that it will introduce white noise plus pick up camera noise. Yes, you'll get nat sound alright, but it will be awash with camera hum and white hiss.
- Most shotgun mics come with a foam covering intended to muffle slight wind noise. However, the exposed foam is susceptible to moderate to gusty wind, rain drops, sleet and brushing against vegetation. Good wind muff socks abound at audio supply outlets or you can simply use a fuzzy foot sock to slip over the mic. Okay, so now you've got the right gear, how do you use it effectively?

Set the stage for quiet

Even though some camera setups take advantage of one channel of audio devoted to the wireless audio mic of the talent's voice, while the shotgun mic is usually dedicated to capture ambient sound, another separate nat sound track is crucial in studio editing to make all the production cuts seamless using background audio. And that requires purposefully planning and capturing nat audio without distractions or contamination.

It's unrealistic to hear a frog croaking during a bass fishing segment then tell the host or talent, "Quiet on the set, I hear a frog". True, the frog croaking at the right times could boost the richness of the audio track but the frog really needs its own, "uncontaminated" sound track. Like any quality endeavor, plan ahead to capture quality natural audio. In most places, this means recording when and where human generated noise contamination is at a minimum. Weekdays, dawn, dusk, and remote all fit into the possible mix. This may mean getting up early and staying up late, but you'll soon find your quality library of nat sounds growing in leaps and bounds. And for loons, whippoorwills, lions, owls and such, you may even try the middle of the night, or at least within the first hours of darkness.

Once you're setup in a location with some cool nat audio occurring, minimize any camera noise by taking the shotgun mic off the camera (if the cord permits) and secure it (Velcro quickstrips) pointed in the direction of the best sounds. I use a cord that lets me secure the mic about two feet in front of the camera on a sapling or tree branch. Using this technique you shouldn't get ANY camera noise. Setting on a flat rock or near clam water will allow those surfaces reflect the sounds into the mic.

Now set the camera down or on a tripod to minimize any camera or cord movement. Start recording and step back a few paces (as long as your headphones cord permits) and sit or stand perfectly still. I've heard lots of would-be attempts to capture cool nat audio ruined by someone trying to "quietly" handhold the camera while they swatted bugs or sniffled their nose.

Finally, let tape roll for two to three minutes per capture. Tape's cheap stuff compared to the rare sounds of fighting elk or roaring lions. You might even make a shoot list for audio capture based on the type of field production you're doing. Here's a simple "daily" list of possible sounds to capture for an African production:

- Predawn ambience – crickets, cicada, lion roars, hyenas
- Dawn ambience – soft crickets, soft doves, sand grouse chatter
- Morning bird ambience – doves, oxpeckers, louder sand grouse chatter.
- Daytime bird ambience – various mixes
- Wind ambience - slight breeze. Moderate breeze. wind trees, wind grass, wind scrub.
- Specific sounds – Cape buffalo grunting, elephants trumpeting, hippos bellowing, fish eagles screaming, monkeys chattering, wildebeest grunting.
- Water related sounds – river water rushing sounds, close and medium range. Next to water, up on riverbank.
- Reverse the above list from midday to dusk and after.
- Unlike most "natural" audio, native voices or songs – such as a Maasai tribal dance could also be a valuable asset to add to the list.

So what's the big deal with messing with all this nat audio? I had a client recently give me some HD tapes of two very intense Cape buffalo hunts that he wanted produced within an action feature production. I was shocked to find out that after I took the job that three hours of the crucial buff hunting tapes had NO FIELD AUDIO whatsoever. Fortunately, the client was savvy about production and discovered the camera operator's error on location and attempted to have the hunter and PH re-enact some of the action. Then my challenge was to seamlessly assemble two, completed 6-minute real live-action hunting sequences using mostly footage with no audio. The end result was a finished production with 17 hunts where even most pros couldn't pick out which ones were missing the field audio. A few editing tricks and quality nat audio saved the day on that job and salvaged what some producers may have tossed on the editing room floor.

Part 2 – Cleaning nat audio, then making it sing in production without stealing the show.

In the past year alone, Dan Bertalan of greatoutdoorsmultimedia.com has used his nat audio library and skills to help capture a Silver Telly Award in outdoor production, Honorable Mention at the International Wildlife Film Festival, and Third Place in OWAA's Big Game Hunting TV/Video competition.