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BONNAROO 2004 KEEPS GOING AND GOING AND GOING

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Regional section for *Mix's* December 2013 issue visits the Northeastern U.S. (Boston, New Jersey, Maine, and more). Send us your studio news: updates, sessions, new rooms, club performances and installations. Let the *Mix* audience know what is going on! Send photos and descriptions to mixeditorial@nbmedia.com.

It's like nothing else: Three days, 90,000 fans, six stages and 80 bands, with music each day from noon to 4 a.m. It's everyone from Dave Matthews, Trey Anastasio and the String Cheese Incident to Bob Dylan, Gillian Welch, Wilco, Danger Mouse and Los Lonely Boys. For the recording, a crew of more than 40-staffed six mobile recording units and four on-site mix suites to cover 65 full sets — each two to four hours long. It's Bonnaroo, where jams rule and high-tech recording captures the magic.



At first glance, those two things might seem diametrically opposed: the laid-back gestalt of the jam band culture vs. advanced technical expertise. Not so. It's a brave new world out there, and multiple uses of content are the name of the game for musical artists intent on survival. At Bonnaroo 2004, held last June in Manchester, Tenn., 60 miles outside of Nashville, the absolute latest in technology was utilized to get those three-plus-hour sets recorded and ready for distribution, ASAP, to fans.

"It's an interesting model," admits Hank Neuberger of Chicago's Third Wave Productions, who, with partner Terry Fryer and



music producer John Alagia (John Mayer, Dave Matthews, Rachael Yamagata), served as producers of the mammoth recording endeavor. “We used new processes to solve some unique problems. To date [November 2004], there have been approximately 20,000 downloads of whole sets on www.bonnaroolive.com. Now we're working on the CD and the DVD.”

Alagia, Neuberger and Fryer had worked together at Bonnaroo 2003, where they produced the post-festival 2.0 and 5.1 DVDs, a double-CD and the recordings used for the soundtrack of the Bonnaroo movie. It was a big job, but 2004 shaped up to be even bigger.

“We'd been talking with the promoter about how the market for these bands has changed,” Neuberger explains. “Rather than relying on a CD where each band got just one cut on a compilation, the fans also wanted whole sets. The obvious way to make that accessible was with digital downloads.”

Once the decision was made to make downloads available as soon as possible after the performances, strategic planning began. It was decided that, in addition to capturing the audio, it would be most efficient to mix as much as possible on-site, where artists and their management were available to provide input.

“There were six stages where we recorded about 70 sets,” continues Neuberger. “We hired six teams of mobile facilities [Big Mo's trucks, dubbed “Mabel” and “Shorty,” covered two stages; and Metro Mobile, Tour-My-Studio, Tinder Arts and Samsonics handled the other four]. Our first deliverable was a live mix from the six stages; a lot of that went over to XM Radio during the festival. After that, we took the multitrack recordings and remixed the full sets. Of course, being Bonnaroo, part of the challenge was the length of the sets.”

Splits from each of the six stages fed a combination of Pro Tools|HD Accel and Tascam MX-2424 recording systems. The recordings, both multitrack and stereo reference, were collected on FireWire and SCSI drives, then brought to nine “ingest” stations: computers, set up to input the recorded material, with network connections to the AVID/Digidesign Fibre channel SAN, called Unity, that disseminated program material to the four mix stations.

Digidesign was a key partner in the recordings, helping out with a customized system installation for the mix suites. All four suites ran Pro Tools|HD Accel; two were fitted with Digidesign ICON consoles and two with ProControls.

“Digidesign brought down a semi truck's worth of equipment to outfit the mix stations, which were arrayed around the Unity,” says Neuberger. “The four mix workstations, plus a number of editing and input stations, worked as spokes on the SAN. Ganon Kashiwa, senior hardware products manager for Digidesign, came down to help out. He had a great perspective on what could be done with the SAN and the consoles.”

“I went to Bonnaroo to be the front-line instructor on the ICON to the guys who were mixing,” comments Kashiwa. “Hardly anyone had seen one before, so I wanted to be there to give them all the support they needed.”

Prior to the festival, an advance setup of the system was staged at Digidesign's Menlo Park, Calif., manufacturing headquarters. “We roped off a big space,” explains Kashiwa, “with 15 Pro Tools systems for the ingest stations, the mix stations and the Unity system. We recorded material and sent it station-to-station to ensure that the interchange was working. We mounted and unmounted numbers of drives on the systems, transferred them to the Unity system and then



L to R : Luther Dickenson of North Mississippi All-Stars, mixer Jon Altschiller, producer Hank Neuberger

deployed sessions to mix stations and upload stations, ensuring that the information transfer from what was going to be field recorders was robust enough.”

Once on site, the system took approximately three days to assemble. During the show, as each set finished, hard drives, along with set lists and CDs of the rough board mixes, were delivered, either by golf cart or sneakernet, to the main production compound. After being logged in, the hard drives went to Bonnaroo data manager Azuolas Sinkevicius, who supervised inputting the recorded tracks into the SAN. Once loaded, the program material was in-line for mixing at one of the four suites manned variously by mixers Neuberger, Alagia, Jon Altschiller, Doug Derryberry, Sam Fishkin and Chris Shepherd.

“It was immensely helpful that [working with DAWs] we could stop at any time,” points out Neuberger. “If an artist came into the trailer to listen to something we'd mixed earlier, we could stop what we were doing and instantaneously pull up their mix. And because we were working on the SAN, if for some reason we needed to move a project to another suite, it was easy.”

Once the mixes were finalized and automated, the actual process of laying down the finished two-mixes was, in most cases, moved to a separate location, freeing up the consoles to start mixing the next band's set. Ultimately, approximately 16 sets were mixed on site. Neuberger notes, “We were able to pretty quickly generate reference CDs for the bands — some, like for My Morning Jacket, Dave Matthews Band and North Mississippi All Stars, during the festival; most of them right after. At the same time as we were mixing, we also had some of our staffers inputting rough mixes from the CDs into an iTunes library. It was an easy way to organize them and be able to burn reference CDs. As we completed remixes, we also put them in. That really helped: At an event like this, there's always a demand, for weeks afterward, for reference CDs.”



Ganon Kashiwa at the ICON, day of show

Data management, of course, was key. “We came home with about 9 terabytes of audio,” says Neuberger with a laugh. “Remember, we had not only recorded material, but also set lists, band photos and CD two-mixes for reference. It wasn't just capturing the performances — we also had to be able to find and identify all the songs. At festivals, it's really hard to get accurate set lists; you often have to go back after the fact to get titles. There was a lot of information to manage: some of it digital, some of it on paper.”

Katie Friesema, of Chicago's Production Consultants Guild, a software company created by Paul Bradley and Dave Matthews Band monitor engineer Ian Kuhn, served as the project's librarian/air traffic controller. Friesema and her assistant, Dave Matthews Band's archivist Tucker Rogers, were charged with figuring out, in advance, what to keep track of and how to coordinate data flow. “I sat down with Terry Fryer and we talked about what the needs of the database would be,” Friesema recalls. “We tried to anticipate what all the problems would be and built around that. We also ended up tweaking it quite a bit on-site. Every time a set list would come in, we'd enter it with individual mix numbers. Then every time a mix was done, we would enter in the new version of the song with a unique number for it. On top of that, we kept track of what part of the process we were in with each song. We could look at one page and see who was mixing what, where.”

Thirty-six 250-gigabyte FireWire drives were premarked and tracked through the process. As it turned out, there weren't sufficient SCSI drives on site, so material recorded to SCSI had to be unloaded to the servers. “That was more complicated,” notes Friesema “Those drives were wiped and sent back to be re-used.”

Post-production mixing took place at Third Wave Productions in Chicago and at Chiller Sound in New York City. “The sets were not only remixed — either on site or in post-production — but also sent to the artists for approval,” Neuberger notes.

“That's why these mixes are so good: We got to remix and the artists had the chance to approve them.

“We had 43 people on this working 'round the clock,” he adds. “The SAN was key to the concept because the goal was to be able to generate content on livebonaroo.com within a week. It took a few more weeks to get artist approvals for more sets. Now [in November] there are about 30 bands' sets up on the site, and we're far from done. The compilation CD is scheduled for a January release. We're also working on mixes for the DVD, which is scheduled for a February release.”

Even with months of advance planning, the trial run in Menlo Park and hours of brainstorming about possible pitfalls, there were, unavoidably, plenty of surprises: air conditioning failures (in June in Tennessee!), power problems and, of course, what would a festival be without rain?

“There was rain both days, which affected getting material back and forth from the trailers,” says Neuberger. “The air conditioning in one of the trailers failed and we thought the Pro Tools system would overheat. It came close, but we brought in fans and moved some equipment around and we were okay. We were short a forklift loading in, our data manager missed his flight when the airlines messed up his reservations, we had 40 people flying in on tight schedules so it was very nerve-wracking. The hotel situation got messed up too, but it didn't matter much because no one slept!

“All in all, it was a daunting challenge that never let up. In the end, we really broke some new ground. It's really amazing to consider that the technology to do what we did this year did not exist two years ago.”

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Bob Weir, of The Dead and RatDog, gave a standout Bonaroo performance.



Robert Randolph sings to a crowd of 90,000.

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String Cheese Incident played one of 65 full sets at the 2004 Bonaroo event.

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