



An Impact Soundworks Instrument
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Recorded by Daniel Da Silva

Introduction

The **Sonic Forest** is based on a curious and rare electro-acoustic instrument of the same name. The instrument consists of various gauge strings attached to a box with a small contact mic and line output. Striking or bowing the strings produces a range of timbres, from pure and tonal to very inharmonic.

After sampling the instrument in depth, we took this idea of a 'forest' and transformed it into an experimental sample library powered by Kontakt. All of the raw recordings are available, which were produced by striking the top and bottom of each string with a fork, as well as both long and short bows. But the real magic happens when a sound is "planted".

Planting a sound captures and spreads it across the keyboard, and enables the wondrous forest to grow and sprout through a custom granular synthesis engine. By playing with different source samples and evocative knobs like "Flood", "Blossom", "Flourish", and "Sun", and endless variety of granular electro-acoustic textures are possible which can decay over time, or sustain and evolve endlessly.

We are very proud of the **Sonic Forest** and we hope that the eclectic sounds, inspiring artwork, and infinite sound design possibilities will truly inspire you!

Installation

*Note: The **Sonic Forest** is only compatible with the full version of Kontakt (not Player), version 5.3.1 or higher.*

Once you have downloaded the library RAR file, simply extract it to the location of your choice. Then, within Kontakt, load the NKI presets using Kontakt's browser.

You can also drag NKIs in to Kontakt from your computer's Explorer or Finder windows, or use Kontakt's Quick Load or Database features.

No activation is required for the Sonic Forest.

Content

The library includes 10 articulations, with room for an 11th user-imported articulation. 8 of these articulations have a variety of dynamics, round robins, and varying tones depending on key range.

Articulations can be enabled by pressing the corresponding keyswitch, starting at MIDI note C0 and ending with A#0. Articulations can also be selected polyphonically, by holding one keyswitch and pressing one (or more) other keyswitches.

The articulations are:

Tapped with fork:

- Front String, Base (C0)
- Back String, Base (C#0)
- Front String, Base Variation (D0)
- Front String, Top (D#0)
- Back String, Top (E0)
- Front String, Top Variation (F0)

Bowed

- Front String, Long Bow (F#0)
- Back String, Long Bow (G0)
- Front String, Short Bow (G#0)
- Back String, Short Bow (A0)

User articulation: A#0

Importing Samples

The user articulation (A#0) plays back the file labeled named **!User-Sample.wav** in the Samples folder. You can replace this file with any other WAV, AIF, or NCW file of the same name, and the instrument will read it properly. **The root pitch of the sample will be loaded as C3 – keep this in mind!**

You can also manually import a greater variety of samples (including multi-dynamic and chromatic samples) by using the Group Editor in Kontakt. Navigate to the bottom of the editor (or use the Monitor -> Groups tab in the Browser) and drag or paste your samples in to these groups:

UserSampleDry
UserSampleWet
UserSampleWetRev

An easy way to ensure your samples are the same across all three groups is to configure them as desired in "UserSampleDry" first. Then, select all samples in that group, right-click, and Copy them. Then, Paste them into the other two groups, one at a time, by selecting each group one-at-a-time with "Selected groups only" enabled. (**Note: Do not map any samples to the lowest note C-2!**)

Entering the Forest

Starting from the basic Sonic Forest.nki patch, usage is very simple. Every note above A#0 corresponds with a pitch. Low velocities trigger quieter, more muffled notes, higher velocities bring out brightness and additional volume.

The real magic happens when you press the **Plant** button at the top of the interface. When this is pressed, the instrument captures the last played sound and stretches it across the keyboard. Thus, you will get the same timbre without the variation and sample-switching as normal.



When you have Planted a sound, the **Grow** knob will automatically increase. **Grow** controls the level of the granulation effect – or, as we like to call it, the growth of the **forest**.

The tone of the granulation is based on the Planted sound. You can dramatically alter the sound of the growing forest by trying different source sounds: different keys, velocities, round robins, and especially different articulations.

If you would prefer to hear only the forest and not the source sound, you can turn the **Volume** knob all the way down (or adjust as desired).

Tending the Forest

A huge part of enjoying the Sonic Forest is adjusting the wide array of knobs in the center of the interface. If you ever need a reference while using the instrument, just hit the **Info** button beneath the Impact Soundworks logo.



As you read on, keep in mind that these controls only have an effect when **Plant** is enabled, and **Grow** is turned up to the point where it is audible.

BLOSSOM: As this knob increases, the chance that the generated grains will play at a higher pitch increases. The possible altered pitches are a 5th, 12th, 19th (octave + fifth) or 24th (2 octaves). You can **alt-click** the knob to toggle the 5th/19th grains on or off. This adds a wonderful brightness and shimmer to the forest.

FLOURISH: Controls how the granulation engine selects the next grain to play. At very low values, the granulation works mostly in a linear manner, playing one chunk of audio in the waveform and then moving to the immediately following chunk. On the other hand, with Flourish turned all the way up, the grain selection is entirely random.

AGE: Introduces a lush algorithmic reverb and 'sweet spot' delay strictly to the forest, without affecting the Planted sound. This gives a hollow-like quality to the forest, as if looking up the trunk of an ancient tree.

FLOOD: Washes out the sound by introducing a very spacious convolution reverb effect to the forest. As the knob increases, the amount of dry signal decreases. When Flood is at max, the sound truly becomes 'flooded' with reverb as you are hearing all echoes and reverberation with no source at all.

BLOOM: Affects the speed at which the grains are triggered, with higher values directly increasing the speed of the granulation and growth.

SHAPE: Essentially an inverted attack knob that affects only the forest grains. As Shape increases, the grains take on a more harsh and edgy quality, while decreasing the knob softens their attacks and blends them together.

SUN: Increases the cutoff of a gentle high pass filter which affects only the forest.

SHADE: Decreases the cutoff of a gentle low pass filter which affects only the forest. Note that both Sun and Shade can be used at the same time for a bandpass effect.

TANGLE: Affects the speed and length of the granulation. High values result in shorter grains played back faster, while low values can produce very long grains played back slowly. This can be used independently of the Bloom knob to control length and speed in interesting ways. By **alt+clicking** this knob, you can also control the amount of "Variety" in the forest, which affects the randomness of the grain timing. Once you have set the Variety to the desired value, you can drag the Tangle knob normally and reset it to whatever you would like.

WITHER: When set to minimum value, the forest grows and evolves endlessly, lasting for as long as the trigger key is held. Higher values will make the granulation effect decay over time, as if a gradual decay envelope with no sustain has been applied.

Instrument Settings



Tune: Changes the fine tuning of the entire instrument, both source sound and forest alike.

Trans: Transposes MIDI notes as they are played, also affecting source sound & forest.

Vel > Vol: Controls the degree to which velocity affects the volume of the sound.

Offset: Sets the playback position of the source sound, planted or otherwise, but has no effect on the granulation engine.

MW: Vol | HP: Toggles the effect of the modwheel. Vol links the modwheel to volume swell, while HP links it to a very gentle highpass filter cutoff. Both of these affect the forest and source sound.

Vol Envelope: Sets the Attack, Decay, Sustain, and Release settings for the instrument, not including the forest grains (whose volume is dependent on the forest-specific knobs).

Pitch Envelope: Sets the Attack, Decay, Sustain, Release, and Depth for all parts of the instrument, including the forest.

Microtuning: The instrument supports custom microtuning scales by first selecting the desired root key from the dropdown (labeled "C" in the picture above) and then using the table below to set fine tune offset values, in cents, based on that root key.

For example, if "C" is selected, the first column of the table is the tuning offset applied to all "C" notes on the keyboard.

There are also a variety of microtuning presets available from the other dropdown (labeled Default in the image above.)

Arpeggiator



The Arpeggiator is enabled by clicking the 3 bars to the right of the word **Arpeggiator**, and has two modes:

Arpeggiator mode is **enabled** when the Pitch power button is **disabled**. In this mode, the system plays back all held notes in the order determined on the right side ("As Played", "Ascending", or "Descending").

Sequencer mode is **enabled** when the Pitch power button is also **enabled**. In this mode, each note played generates a sequence built on that note; the notes in the sequence are determined by the values in the Pitch table.

You can switch the viewed table by clicking the labels **Pitch**, **Volume**, and **Length**.

The **Volume** table, if enabled, modifies the velocity of each step (otherwise, the same velocity is used for all steps).

The **Length** table, if enabled, sets the length of each note – start with 100% of the tempo sync value, to a minimum of 1%.

The **Steps** control sets the number of steps in the arp / sequencer, while **Sync** or **Period** sets the timing value. (Turn Tempo Sync OFF to edit Period, which is independent from Host BPM).

Snap controls when the arp / sequence starts, based on host position in playback. For example, a snap of **bar** means the arpeggiation will not start until the host reaches the downbeat (bar).

Loop End Mode (Loop by default) sets what happens when the # of steps hits maximum. In "Hold", the last step is held out like a normal note. In "Stop", the sequence or arpeggiation simply stops.

Effects Rack



By default, our custom FX rack only affects the source articulation or planted note – not the forest grains. However, this can be toggled in the upper right.

The asterisks (*) next to each effect can be clicked to randomize the parameters.

EQ: A four-band, analog-modeled parametric EQ. All four bands have controls for gain (+/- 20dB) and frequency range. The low-mid frequency band (LMF) and high-mid (HMF) also have

controls for the width (or "Q") of each band. A lower Q value means the band is narrower and affects a smaller range of frequencies, while higher Q values can affect multiple octaves worth of frequency content.

COMPRESSOR: An analog-modeled, SSL-style compressor that can be used for both subtle and extreme processing. All controls are standard to compressors; the Mix knob can be used for phase-accurate blending of the dry (uncompressed) and wet (compressed) signals.

BITCRUSHER: A key effect that can reduce the bit depth and sampling rate of the audio output in real time. Great for adding even more grit and crunch to any sound. The Noise knob introduces *constant* line noise, while Noise Color filters this noise.

DELAY: An all-purpose, tempo-synced delay unit. The MIX knob blends between the dry and wet (echoes) signals. Damping, when turned up, dampens (lowpasses) the high frequencies from the echoes. Pan increases the amount of 'ping pong' L/R in the echoes.

REVERB: A convolution reverb with a large collection of our custom impulse responses (IR). HPF and LPF filter the reverb signal, while Size changes the length of the IR. Note that this effect is somewhat CPU-intensive and, on some older computers, may not be suitable for real-time tweaking. Also note that the HPF, LPF, and Size knobs are not processed in real-time and thus are not automatable.

CHORUS: A simple chorus effect with 'Smooth' mode toggle, effect depth, speed, and phase. Note that even at 0 depth, the effect is still somewhat audible.

Credits

Lead Design: Andrew Aversa

Recording: Daniel Da Silva

Artwork: Constructive Stumblings

Scripting: Nabeel Ansari & Andrew Aversa

Editing: Simon Dalzell

Troubleshooting and Feedback

Have you used **Shreddage 2 SRP** in a project recently? Got an awesome track you'd like to share? Drop us a line (admin@impactsoundworks.com) and we might post it on our website! Or, tell the world at our Facebook page here: <http://www.facebook.com/ImpactSoundworks>

We encourage all our users to share and promote their work. Word of mouth is the #1 way people find our samples, so it also helps us to produce more great libraries for you!

For any technical support issues regarding the library, don't hesitate to email support@impactsoundworks.com.

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