

## **JUMP OR DIE**

Atop a new generation of souped-up sticks, a group of gravity-defying tricksters want to do for pogo what legends like Tony Hawk did for skateboarding.

## BY ANDREW ZALESKI

PHOTOGRAPHS BY JUTHARAT PINYODOONYACHET

**BROKEN ASPHALT** scars the parking lot between the buildings of the abandoned Gladstone School in Pittsburgh. Concrete staircases sit unused. Rusted iron fencing encircles the recess yard. Graffiti covers brick walls. Even the sky, as if understanding the setting, is overcast.

But on this warm May day, this ghost town amounts to an urban playground for a band of extreme-trick artists. Their vehicles of choice: pogo sticks. Within minutes of arriving, six jumpers begin sizing up the obstacles over which they'll bounce, flip, and spin.

A small, fenced enclosure catches the eye of 19-year-old Konner Kellogg, who stands five-foot-nine. He steps onto his pogo's pegs and within three bounces is sailing more than 8 feet into the air. Whoosh-whoosh-whoosh. As the others stop to take in the scene, Kellogg—or just "Logg" to his gravity-defying crew—hurdles a 5-foot section of fence, windmilling the stick counterclockwise in front of his face. Feet back on the pegs, he touches down and goes skyward once more, this time throwing his stick upward and slamming his hands on the foot pegs before grabbing

Extreme pogo star Konner Kellogg in the middle of a nofoot cannonball, one of the sport's trickiest stunts. the handlebars again (a move called the no-foot cannonball). With the final bounce he soars straight above another piece of fencing and sticks a flawless landing.

"Logg's line was so sick," says Henry Cabelus, a 23-year-old who backflipped over a handrail seconds before.

"Dude, it's mental havoc, bro!" replies Kellogg, removing his helmet to reveal a mop of dirty-blond hair.

Welcome to extreme pogo. Take the ethos honed by skateboarders, transfer it to a stick that springs up and down, and you have the idea.

For two decades, a small group of madcaps has radically probed the physics of what many consider a simple children's toy. The pogos they ride, however, are anything but. Engineered to be capable of incredible height, their sticks open the sport to ever more impressive feats.

"It never ceases to amaze me," says Nick McClintock, the 35-year-old co-founder of Xpogo, a Pittsburgh-based company that acts as govern-



The crowd hoists Dalton Smith in celebration after he completes a record-setting 12foot pogo leap.

ing body for the burgeoning sport. "We thought jumping over 6 feet was never going to happen. It's honestly insane."  $\,$ 

Xpogo organizes sessions like the one at Gladstone several times a year to bring together the geographically dispersed few who can bust out jaw-dropping tricks—and encourage them to push their limits. The group also puts on expos (at NBA halftime shows, for example) with its stunt team, an assemblage of a dozen of the best jumpers, including Cabelus and Kellogg.

This all leads up to the org's biggest showcase, Pogopalooza. Now in its 19th year and anchored near Xpogo HQ just outside Pittsburgh, the June event is its version of the X Games, featuring about 20 elite stunt artists from around the world soaring high and exhibiting mind-bending feats. There are four competitive events, including Big Air, which gives riders 60 seconds to perform their most impressive moves, and Best Trick, which is self-explanatory.

What Pogopalooza lacks, though, is mainstream popularity, and it's that outsider status that pogo's elites want to change. After all, isn't skateboarding in the Olympics? "We just want to be a part of the rest of action sports," says Dalton Smith, a 25-year-old from Tennessee and an Xpogo stunt team member who holds the record for highest jump: 12 feet.

A leap like that requires a certain degree of athleticism: power in the legs to push off, strength in the arms to hold yourself steady. Tricks, meanwhile, demand skill and precision. Take a move Kellogg pulled off at

Pogopalooza 2021. He hit the same no-foot cannonball he did at the Gladstone School, but before landing, he grabbed a handlebar and spun the stick behind him through his legs. Two maneuvers in one, seconds before he hit pavement.

Extreme pogo athletes have appeared on *Late Night with David Letterman*, YouTube channels, and Instagram pages, and the sport occupies its own category in Guinness World Records. Still, the pastime hasn't quite transcended quirkiness, but some veterans feel a change is coming. "It's definitely at a tipping point," says Fred Grzybowski, who pogoed on *Letterman* and, at 33, is something of an elder statesman.

Xpogo tries to nudge this along by taking its stunt team on the road to street festivals and fairs. It collaborates with companies like GoPro, which makes videos of pogo athletes. In March, Xpogo got a boost when



Tone Staubs (far right) uses a bike pump to boost the air pressure in his Vurtego pogo stick for maximum bounce.

Aaron Homoki, a top pro skateboarder, posted an Instagram video of stuntmen doing tricks at a park in Phoenix, Arizona.

But the main difference of late? A generation of young guns riding pogo sticks to greater heights and pulling wild stunts older jumpers haven't seen. "They're doing things that we never imagined we would be doing," says 30-year-old Tone Staubs.

This year, Kellogg and others are taking aim at Smith, arguably the sport's best: He's won Big Air the last seven years. Winning at Pogopalooza, though, as these lords a-leaping will tell you, is about more than trying to unseat a champion. It's another chance to stake a claim for pogoing as a legit extreme sport—by throwing tricks that are bigger and more dangerous than anything that has come before.

**WHEN TRICK POGO** emerged in the early 2000s, the spring-loaded contraption kids typically discard in grade school was all its earliest devotees had at their disposal. Medium air, so to speak, was the best that guys like Grzybowski, Staubs, and McClintock could achieve. In the absence of enough hang time to pull a flip, the stunts were more technical than showy: spinning the bars, jumping and grabbing a foot peg, hopping with one leg draped over the handlebars in a move called the candy bar. In places across the US, these pioneers were creating a sport.

They found each other online. Before Xpogo incorporated in 2012, it was merely an internet forum where people posted video after video of various exploits. The first Pogopalooza, in summer 2004, was seven dudes from across the country in a church parking lot in Lincoln, Nebraska. Top

prize was a bag of trail mix. "That was everybody who was doing tricks on a pogo stick," says McClintock.

Old-school sticks store potential energy (i.e., how much oomph they are capable of providing) in a spring, which conforms to basic, linearly proportional laws: Compressing a coil to half its extended size causes it to hold on to twice as much force. When the spring returns to its uncompressed state, it provides enough *boing* to nail an under-the-leg bar spin (pogo's equivalent of skateboarding's 360-degree kickflip), but the fixed physical properties of the gauge, or thickness, of the steel limit a coil's potential. The best air one can hope for is 6 feet. You could make a pogo stick with a thicker gauge to gin up more potential energy, but heftier metal makes for a heavier ride that'll weigh down the jumper.

What happened next was fortuitous. A few inventors saw making pogo sticks for adults as a unique engineering challenge, one worth taking up just for kicks. Bruce Spencer, a former Northrop employee, his son, Brian, and Bruce Middleton, a Massachusetts Institute of Technology graduate turned stay-at-home dad, all sought to design not a toy, but a high-flying machine.



Left: Konner Kellogg backflipping during Pogopalooza 2022. Right: Tyler Phillips pulls an under-theleg bar spin, the pogo equivalent of skateboarding's kickflip.

Not long after the first Pogopalooza, Middleton introduced the first new scheme to boost potential energy with a stick called the Flybar. It featured 12 elastomer bands—big pieces of rubber, basically—fitted inside the cylinder that forms the main body of the device. Initially, this seemed to be the answer. The bands were much lighter than metal, and each generated 100 pounds of force, more than enough combined energy to launch someone skyward. By 2005, people riding Flybars were landing full backflips, a trick jumpers could never have executed just five years earlier.

Too much use, though, robs rubber of its elasticity. For the Flybar, that means eventually the bands get stretched out and need replacing. Doable, but annoying.

Two years later, the Spencers bounced onto the high-end pogo scene with Vurtego, a stick that uses compressed air, which overcomes elastomer's failings. Air is lighter than rubber and doesn't wear out. Bonus: Riders can adjust it on the fly. Low pressure means less of a bounce, giving jumpers more control. For big air? Break out the bike pump. A Pogopalooza-ready stick—most competitors use the Vurtego V4—usually holds between 70 and 100 pounds of air per square inch. Compare that to a basketball, which holds about 8 pounds of air per square inch. One of the tires on your car? Somewhere between 30 and 50.

"That's when I feel like pogo really took off," says Patrick Cooper, a professor at Duquesne University and Xpogo's unofficial in-house physicist. "Pressurized air just allowed for a lot more creativity in how they interact with the pogo stick."

With these new sticks, riders began pushing the limits of their imaginations. Dan Mahoney, a 29-year-old Canadian who's credited with expanding the catalog of tricks, landed the first-ever front flip on a Flybar in 2008. He invented the Mandy, named after an ex-girlfriend, while riding a Vurtego. It's one of extreme pogo's most iconic acrobatic acts: Bounce high into the air and whip the stick above your head. As it swings around, it turns the rider around too, until they land back on the foot pegs.

Such maneuvers are scientific phenomena unto themselves. Once airborne, flipping depends on decreasing a metric known as angular mass or moment of inertia; the lower the inertia, the better the rotation. How do you do that? The same way an Olympic gymnast or figure skater manages a complicated spin, says Cooper: by tucking yourself into a ball.

When pogo tricksters lean into their sticks, holding them close to their bodies, they decrease their moment of inertia, which in turn increases their angular velocity—how fast they're spinning.





Left: Tyler Phillips punctuates his backflip with a midrotation clap. Right: Veteran pogoer Dalton Smith releases his stick in flight during a no-foot cannonball.

Vurtego sticks are what the vast majority of jumpers use today in competition. Going big is what grabs the attention of other athletes and the Pogopalooza judges. When Dalton Smith invented the slingshot flip in 2014, everyone took notice. To achieve this move, he bounced and nailed a leapfrog—flinging himself over the top of the stick—and planted his heels, not his toes, on the foot pegs. He then flipped forward in that position while passing the stick under his legs so it was back in front of him just before he hit the ground. Only Smith, Staubs, and 29-year-old Michael Mena, a stunt team member who's been extreme pogoing for almost 20 years, have ever landed it.

A leap forward, though, usually involves an injurious trade-off. At Pogopalooza 2021, Grzybowski fell off his stick doing a candy bar and broke his back. Mahoney has two titanium face plates and a split right calf muscle, among many other injuries.

Smith's injury story, meanwhile, is preserved on YouTube. At his first Pogopalooza, in 2010, he leaped up high with the intention of dismounting with a double backflip. Instead, he belly-flopped onto the concrete, cracking his kneecaps with a cringe-inducing thwack. "It took about three months of keeping my legs straight and then another two months

of rehab and recovery," he says. "But all I could think was, When can I jump again?"

**ON THE LAST** Saturday of June, a sweltering 90-degree day, the impulse to jump gets going well before Pogopalooza 2022 starts in the afternoon. Next to the competition course, set up alongside Xpogo HQ in the Pittsburgh suburb of Wilkinsburg, Vurtego-wielding athletes take turns practicing stunts. An inflatable pad the length of two queen-size mattresses ensures any flop will end in a pillowy embrace.

Konner Kellogg is in line, as is Dalton Smith, who landed his recordbreaking 12-foot leap on Friday. Henry Cabelus, who finished second behind Smith in Big Air in 2021, should be warming up too, but he's out. During a kickoff event downtown last night, he crashed to the concrete during an attempt to break the high-jump record and broke his left foot.

Some are wearing helmets. Some aren't wearing shirts. Most of these guys are doing dry runs of what they hope to pull off in competition. The vibe is more family reunion than cutthroat, with rock and rap music blasting from speakers and cans of Yuengling on the cracked pavement. Still, they want to win—for their own glory, and to gain recognition for extreme pogo. "It definitely has gotten more intense than it has ever been," says Kellogg.



Tone Staubs celebrates with Konner Kellogg, who capped his final routine with a move called the Bruce Lee to win Pogopalooza's Big Air competition.

The course itself has a similar feel to a skate park. Various box obstacles, 2 to 6 feet high, are strewn about, along with rails for pulling peg grinds—using the bottom of a foot peg to slide—and slanted platforms for foot-plant tricks, all atop a rough asphalt parking lot. Next to a wall made for hurdling on the upper part of the lot is an obstacle the athletes call the Death Box: Anchored to another wall, with a pair of 2-by-4s underneath for additional support, it's 8 feet above the pavement. Some competitors jump over it; others use it as a launchpad for sky-high, Evel Knievel–like antics. About 150 spectators have grabbed seats in the lone set of bleachers or found standing room around the course. The judges, five folks huddled under a tent, include pogo legend Dan Mahoney.

Many eyes are on Kellogg. This is only his third Pogopalooza; last year, the Idaho native finished ninth in Big Air. "He came onto the scene just a couple years ago, and he's landed stuff that no one's combined in the air before," says Cabelus.

After the tech contest—a spring-sticks-only category that pays homage to the early days, won for a fourth time by Tone Staubs—come the qualifiers for Big Air, the event most like freestyle runs in skateboarding, where

pogo's best showcase the hardest tricks in their repertoires. That's when the bike pumps and electric air compressors appear as athletes make sure they have the pressure needed to soar. The 10 competitors with the highest scores will advance to Sunday's finals, and pole position matters: Nab the top spot, and you go last in the finals, which means you can scope out everyone else's moves before your run. Smith places third, with Kellogg right in front of him. First goes to Tyler Phillips, a 22-year-old stunt team member from Los Angeles who executes three perfect backflips in a row, followed by a backflip dismount, bouncing high into the air off the stick and corkscrewing before landing squarely on his feet.

During warmups on Sunday, Smith, the seven-time champ, sounds uneasy. "All the new kids are getting me a little rattled this year," he says.



Konner Kellogg raises his helmet in victory. He won two main events: Best Trick and Big Air. In the latter, he unseated seven-time champ Dalton Smith.

This is where the pressure of the weekend comes into sharp focus, as riders get just three runs, 180 seconds total, to prove themselves. Judges count only the highest of their three scores, which are based half on skill (the difficulty and variety of tricks) and half on style (how good the tricks look). Basic stuff doesn't impress, and bailing—failing to land a move—costs you points. By the end of his three runs, having missed a trick each time, Smith sits in seventh place.

Phillips takes a comfortable lead in his first run after hitting a flawless double-backflip dismount (completed after he tossed away his helmet to hype up the crowd). He still holds the lead as Kellogg, sitting in seventh, grabs his pogo to take his third and final run. He's already tried twice to land one of the most complex moves in the sport: a no-foot cannonball onto a 4-foot-high box. Both times he bailed, the second time so spectacularly that he slammed his pogo stick to the ground in frustration.

This third try is different. After hitting a backflip off a slanted obstacle, he cannonballs perfectly. With five seconds left, he bounces up to the Death Box and then plummets, kicking his legs on each side of the stick—a move called the Bruce Lee—before planting his feet on the pegs and landing so well that even his fellow competitors let out a whoop. In 60 seconds, he goes from seventh to first, and he takes home the gold in Big Air.

Whether these sorts of stunts are enough to make pogo break into the mainstream is what Xpogo is still trying to figure out. "That's the golden question," says McClintock, who spent the weekend filming the entire contest, while his counterpart, Xpogo CEO Will Weiner, emceed and explained each trick. This is the challenge of a niche sport. Skateboarding has been around for so long that many people intuitively understand the

difficulty of various moves. In extreme pogo, translating the complexity of daring aerial stunts is a bit harder, but Weiner has hope. "In terms of local attendance, this was the best one we had," he says.

Some tricks, though, are so eye-popping they speak for themselves. After Smith posted a video of his record-setting high jump on Instagram in June, it quickly racked up more than 14 million views. ESPN reposted the clip on its SportsCenter Instagram feed, and Slash—the top-hat-wearing Guns N' Roses guitarist—shared it too.



The crowd at Pogopalooza 2022 was the largest the organizers, Xpogo, have seen in the event's 19-year history.

Vurtego also has ideas of how to make pogo an action sport. Its master plan is to bring to market by Christmas an affordable air-powered stick suited for kids under 10—the ones who aren't big or tall enough to ride competition-level models but who want to try stunts that can't be pulled off on spring-loaded pogos. Hook them while they're young, and cultivate generation after generation of pogo-happy flyboys and -girls. That's how Kellogg got obsessed: He started on a rinky-dink spring stick, and once Vurtego saw some of his Instagram videos in 2018, the company offered him a V4 for \$150, about one-third of its market price.

"I just always wanted to do an action sport," says Kellogg. "Never thought it would be pogo, though."

By the time the Best Trick contest kicks off later in the day, it's a foregone conclusion that Kellogg will go big once again. Through a series of eliminations, judges pick the most singularly impressive feat, and Kellogg's maneuver gets it done. He leaps about 10 feet into the air, banging out an under-the-leg bar spin before windmilling his pogo around in a stickflip, landing, and bouncing three times before coming to a stop. A jubilant Cabelus, on his busted foot, hobbles over for a bear hug. Staubs claps and shouts. And Smith strides forward to record the group's celebration. On the first-place podium, Kellogg—a cut on his elbow, a big bruise on his left knee—takes a massive swig from a bottle of sparkling apple cider.

For now, they all can feel as if the sky's the limit. "I'm happy to be a part of this whole community," Kellogg says afterward. "We do some of the gnarliest things you could ever imagine. I love it, man."