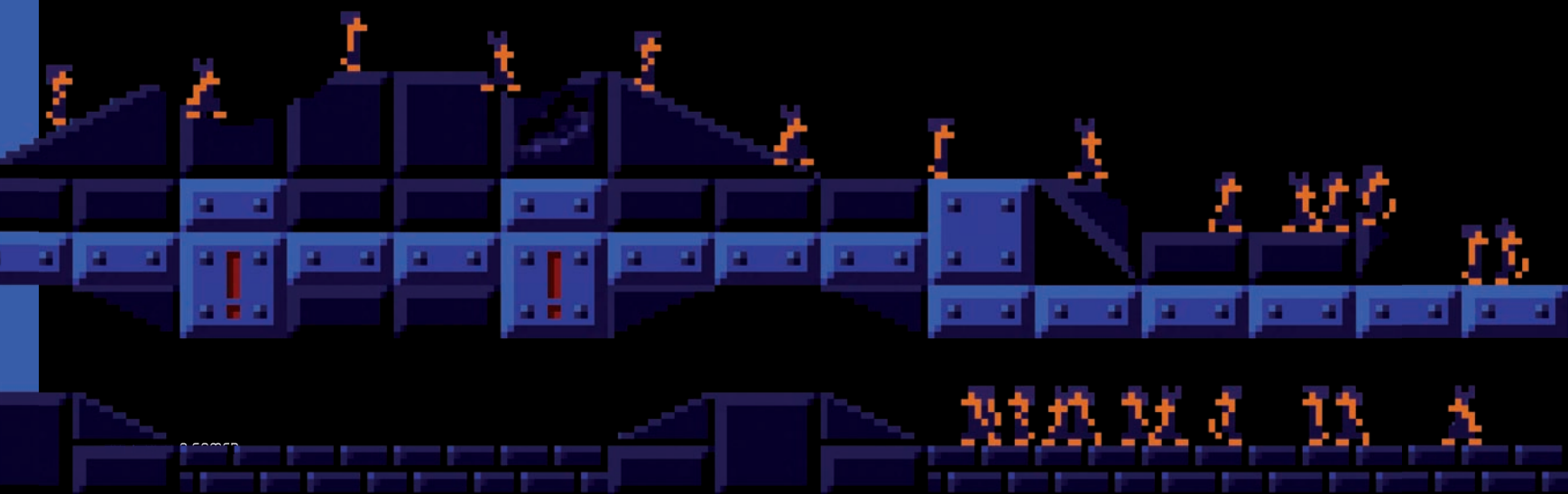


THE MAKING OF...

LEMMINGS 1 AND 2



With their distinctive green hair, cute demeanour, a penchant for jumping off cliffs and self-exploding tendencies, Lemmings are fondly remembered by gamers everywhere. Mike Dailly and Gary Timmons reveal to Kim Wild how one animation became an established series.

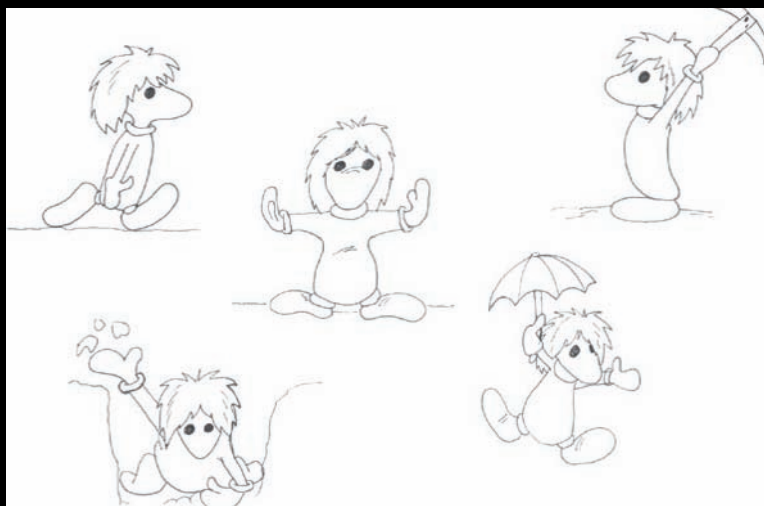




THE MAKING OF: LEMMINGS

"IT WAS SUGGESTED THAT THEY WERE LIKE LEMMINGS AND THE NAME STUCK!" GARY TIMMONS

Lemmings is a game that transcends all barriers of gaming, appealing to young and old alike across many generations. Using just the mouse, the player must guide each lemming home by making use of the skills available, whether it's digging, climbing or floating their way to victory. With superb level design and a smooth learning curve, *Lemmings* is a piece of software that screams planning. It's hard to imagine, then, that its concept originated from an argument over how many pixels could be used to create a small, animated character. The team had been working on *Walker* for the Amiga, which featured lots of running men, and Mike Dailly argued that they could be made smaller. "I had maintained that they could be 8 pixels tall (rather than 16). So I created a small animation that demonstrated



» This concept drawing by Gary Timmons shows how the lemmings are meant to look for box art illustrations.

the new size and showed it to the rest of the guys. However, as luck would have it I had created them walking over a landscape and had added a couple of deaths for them. This struck them all as pretty funny, and from then on the ideas on how to use them came thick and fast, and everyone was determined to use them in a game." It was at this point a character was born. "It was suggested that they were like lemmings – and the name stuck!" recalls Gary Timmons.

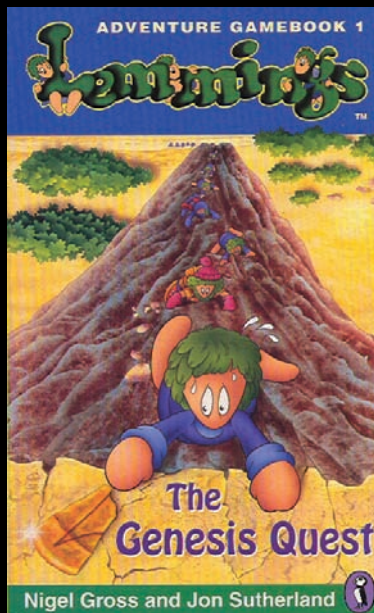
After the realisation that a game could be created, Gary set to work on improving the animation of the lemming. "I modified the walking animation that Mike had done to make them more fluid and then worked on some other actions. The animations were only a few pixels high but that was sufficient due to the power of suggestion. The plan for the game was to put many lemmings on screen at once, so they were reduced from about six colours to three colours to make it easier for the Amiga to display up to 100 on one level. The idea for the game was that

the lemmings would manipulate their environment, so we decided on a variety of ways this could be done by removing or adding bits of the background. Then I had to animate them, paying particular attention to the way the hair moved. I animated the action and then had to lay out all the sprites in a line and provide a list of offset values to determine how they would move on screen."

Interestingly, it was the technical limitations of the PC at the time that determined the look of the lemmings themselves. "The colours were born from a programming problem on the PC" explains Mike. "We knew from day one that we wanted to make it over several platforms (mainly because we didn't want Dave [Jones] to have all the fun) and this meant getting the same visual on all platforms, so we looked at all the limiting factors and the PC had the biggest problems. CGA was rubbish no matter what, but with a little tweaking EGA would be reasonably nice. So because of the limitations of EGA we were left with the option of green hair/blue outfits, or

OH NO! EVEN MORE LEMMINGS!

With Psygnosis now a part of Sony, the *Lemmings* license remains with them and has been put to good use most recently. An EyeToy game for PlayStation 2 has been released and the PlayStation 3 has *Lemmings* available for download. The most prominent *Lemmings* title is the version of the game released for the PSP, which provoked an interesting response from Mike regarding Team 17. "I found it a little ironic that they did the new *Lemmings* as we always thought they were pinching our ideas. I remember we put in bouncing bombs in *Lemmings* 3 and a while after it came out, *Worms* had it as well. Still, while I've not played it (I can do without another *Lemmings* game!) – it looks okay, pretty enough. I just wish they'd spend more time doing original games and not churning out more of the same game."



» The *Genesis Quest* is an adventure gamebook based on the storyline of *Lemmings 2: The Tribes*.

IN THE KNOW



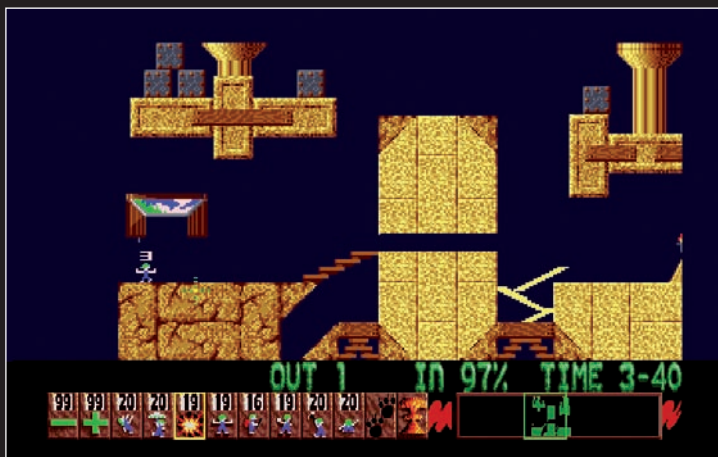
- » PUBLISHER: PSYGNOSIS
- » DEVELOPER: DMA DESIGN
- » RELEASED: 1991 (LEMMINGS); 1993 (LEMMINGS 2: THE TRIBES)
- » GENRE: PUZZLE GAME
- » EXPECT TO PAY: £10



THE MAKING OF... LEMMINGS 1 AND 2



"WE WANTED TO USE THEME TUNES LIKE MISSION IMPOSSIBLE, BUT DAVE AND PSYGNOSIS GOT NERVOUS AND THE IDEA WAS DROPPED" MIKE DAILLY



» Sometimes a lemming has to be sacrificed for the greater good. Sad but true.



» The title screen for the sadly scrapped Lemmings arcade game.

"It would also have been nice to get the two-player mode on the PC, but there were no mouse drivers that allowed two mice at the point, so that was out as well," laments Mike.

With the look in place, giving them a voice in the form of the immortal words "let's go!", "oh no!" and cries of "yippee" upon finally reaching their home gave the green-haired creatures even more appeal. "Brian Johnstone did all the sounds, and although we know his mum supplied the first ever lemmings voice, I have no idea how he came up with the idea," says Mike. "We knew that they had to be cute – and I guess he just came up with what was appropriate. He did a great job, and it would have been a different experience without them."

The creation of the levels themselves was a case of experimentation and making challenges for other members of the team. "We would

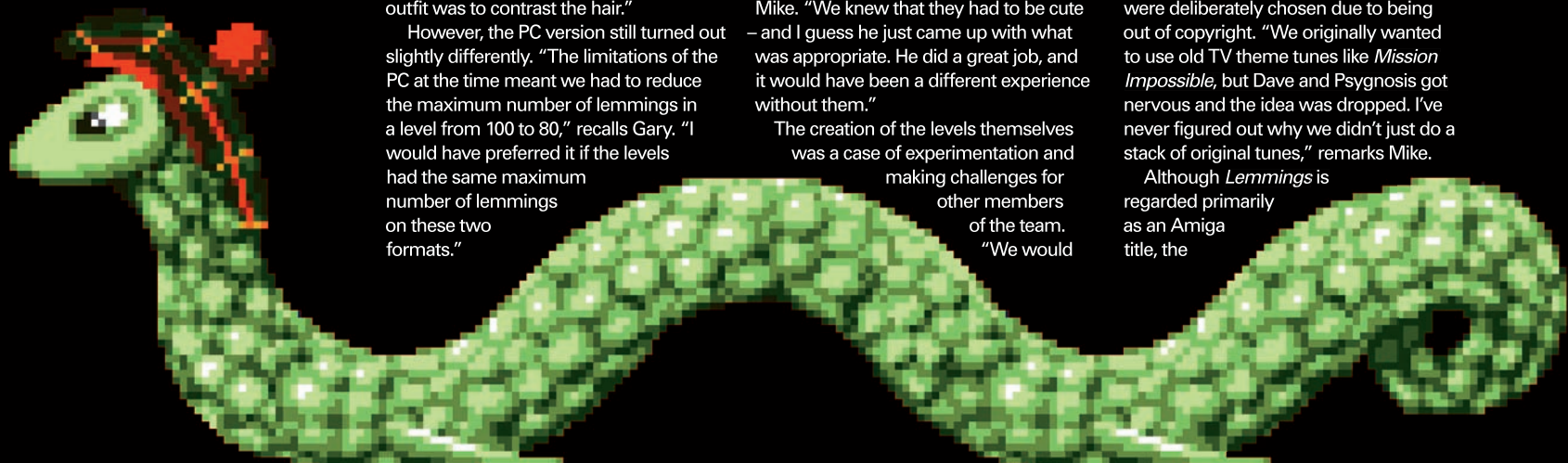
spend hours making harder and harder ones to try and beat the rest of the team; this of course never happened," recalls Mike. "We were masters by this time and it would only take a few seconds to spot the solution, and then a couple more to actually complete the level. Gary, Scott and myself were the main level makers with Dave throwing in the odd level every now and then, but the problem was we had a stack of really good but difficult levels and no easy ones. So Dave got Gary to do some training levels and then tweak the current ones into a nice difficulty curve rather than dropping them in at the deep end. Each of us had our own way of thinking them up, but I liked to draw pretty pictures. I'd either think of a nice puzzle, or a picture I wanted to use for a level and go from there."

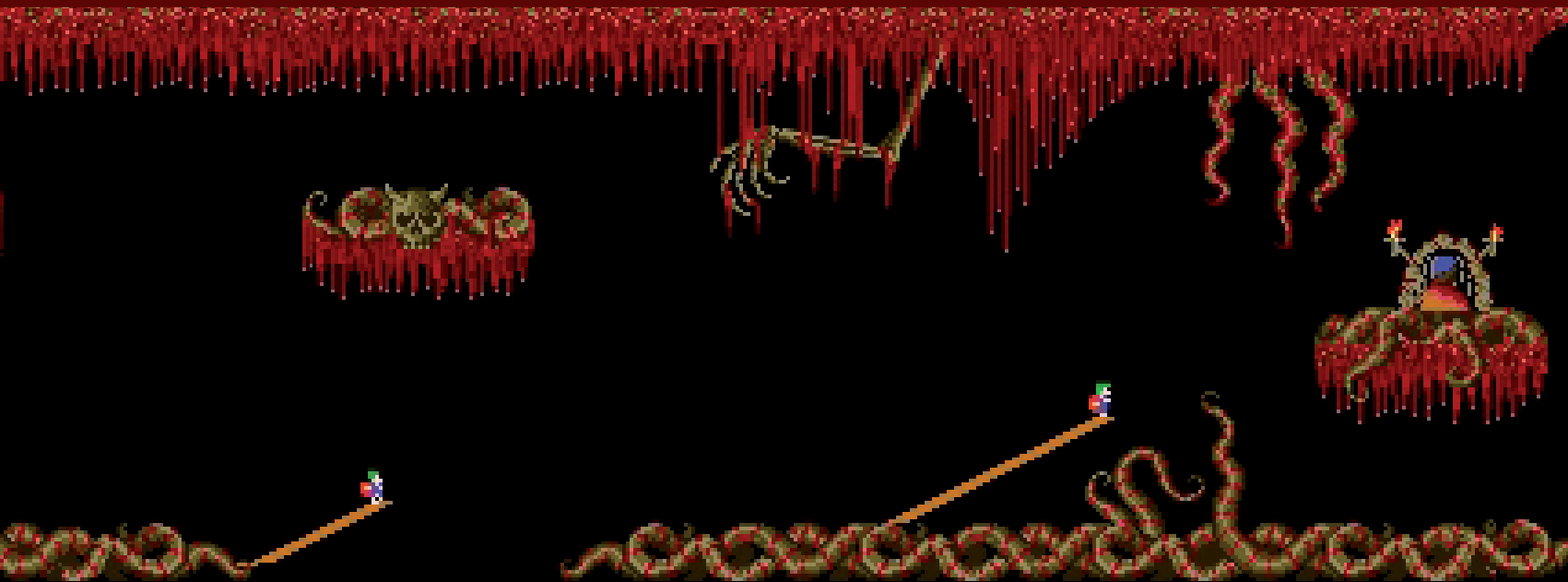
Those who have spent many hours playing the levels will recall humming along to classic tunes, including 'How Much Is That Doggy In The Window?', 'Ten Green Bottles' and 'London Bridge Is Falling Down' among others. Such songs were deliberately chosen due to being out of copyright. "We originally wanted to use old TV theme tunes like *Mission Impossible*, but Dave and Psygnosis got nervous and the idea was dropped. I've never figured out why we didn't just do a stack of original tunes," remarks Mike.

Although *Lemmings* is regarded primarily as an Amiga title, the

blue hair and green outfits. We preferred the green hair." Gary also feels that the colour scheme made the lemmings unique: "I thought the green hair would be different and distinctive and was easy to achieve using the colour sliders in the software. The choice of colour for the outfit was to contrast the hair."

However, the PC version still turned out slightly differently. "The limitations of the PC at the time meant we had to reduce the maximum number of lemmings in a level from 100 to 80," recalls Gary. "I would have preferred it if the levels had the same maximum number of lemmings on these two formats."





game was designed and written across the Amiga, PC and Atari ST concurrently by different members of the team. Russell Kay was responsible for programming the PC title, while the Atari ST game was started by Mike Dailly and finished by Brian Watson. Inevitably, *Lemmings* would go on to be ported across many platforms including the Game Gear, Master System, Atari Lynx, Game Boy, SNES, Spectrum and Macintosh, some of which DMA Design had some involvement with. "We wrote versions for the Spectrum, CD-I, CDTV, and Atari Lynx," says Mike. "The Lynx version was great and is still hailed as probably the pinnacle of Lynx game development. Several ports did impress us – the Game Boy one, for example, was very well done, as was the SNES." Gary Timmons feels that the computer versions were the most effective: "The game was designed to be played with a mouse, so the ones that used a mouse worked best. It wasn't as easy to quickly select a lemming in the versions that used a joystick."

Oh No! More Lemmings was released shortly after the original with 100 new levels. "Oh No!" was supposed to be a data disk, but since the traps were code-driven this wasn't possible, so we simply made a whole new game from



» At high speed, the lemmings are a mesmerising army of green hair.

it," comments Mike. "These were also the first batch of levels to be made by folk other than the original team."

Before work began on the sequel, *Lemmings* took on a festive appearance. "Christmas Lemmings" was originally done as a promo. We did a few levels complete with the lemmings dressed in Santa outfits and gave it away on cover disks. But, Psygnosis being Psygnosis thought they'd cash in on this and came up with *Holiday Lemmings*."



» It's not every game in which you can build a literal stairway to heaven.

original. "Psygnosis wanted more *Lemmings* and we'd just about milked the original to death, so we needed a new version," says Mike. "This time Dave sat down and actually thought about other platforms in the design while he came up with the basic concept." However, the success of *Lemmings* meant there was considerable pressure to deliver, which Mike recalls vividly. "There was quite a bit during *Lemmings 2* and, although Dave usually managed to keep it from us, we were in for some late nights and a couple of all-nighters."

Such dedication invoked some interesting ideas. Although the basics were the same – use the sets of skills of the individual lemmings to reach the goal – the tribes could be tackled in any order, rather than working from one level to another. Given the game's considerable difficulty, this worked very well in its



» Blockers are put to good use and prevent lemmings from seeing an untimely death.



» One lemming does an audition for Mary Poppins.

DEVELOPER HIGHLIGHTS

BLOOD MONEY

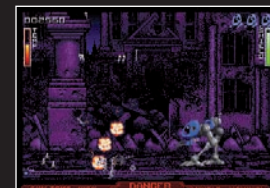
SYSTEMS: C64, AMIGA, ATARI ST
YEAR: 1989

WALKER

SYSTEMS: AMIGA
YEAR: 1993

HIRED GUNS

SYSTEMS: AMIGA
YEAR: 1993

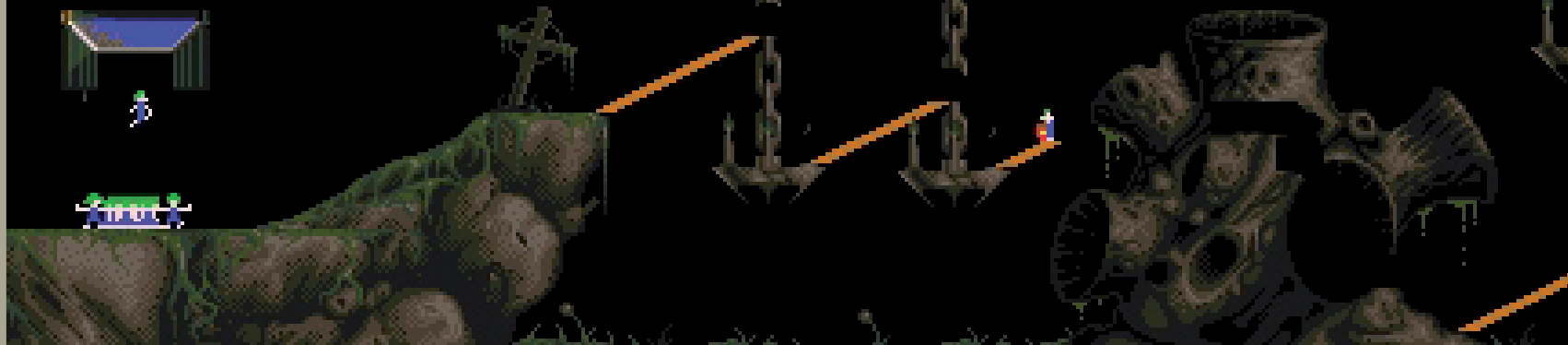


THE REAL LEMMINGS

The basis for the lemmings comes from the real-life rodents that live in the tundra. Their fur is brown but turns white during winter. Unlike many rodents, lemmings do not hibernate in winter: their white coat is thicker and their short legs and tail help reduce heat loss. They also live in burrows in the snow, which is a great insulator. The idea that lemmings commit suicide en masse is a misconception originating from Disney nature film *White Wilderness* (1958): the film-makers purchased a thousand lemmings and herded them off a cliff into a river to simulate the animals marching to their deaths. Scandinavian lemmings have been known to migrate when food is scarce, swimming across large pools of water to find land, but any deaths as a result of this are purely accidental and not out of suicidal intent.



THE MAKING OF... LEMMINGS 1 AND 2



» Some levels require copious use of just one skill.



» Super Lemming shows Superman how flying should be done.



» Many hazards await our friends – be careful they don't step on the switches!



» One for all and all for one, as our brave lemming fences his way through the wall.

favour. "The problem with *Lemmings* was that if you got stuck on a level, then you pretty much got stuck in the whole game. What we were aiming for was a way to give you at least some choice when you got stuck on a level, and this is pretty much why the tribes appeared," explains Mike. There was also a grading system introduced which awarded you with a bronze, silver or gold placing depending on how many lemmings were saved in a particular level. As levels could get very tricky even early on for a tribe, this was a blessing as it meant you didn't remain stuck on one section for a long time. It also had its downside: only the saved lemmings would make it through to the next level, meaning you had to be very careful if you 'accidentally' destroyed half of the tribe! "This was a really easy feature to add and it did create more gameplay and make the game last longer," continues Mike. "People wanted to get 100% all the way through, which meant they sometimes had to play entire tribes again to pick up the number of saved lemmings. Simple change... but easy and a good one."

Lemmings 2 introduced a fast-forward option, which was taken from the planned arcade version of the original game – sadly cancelled in the early stages. "Psygnosis and Data East were working to bring

a version to the arcade, but the slow gameplay wasn't very nice for the fast pace of arcade machines, so they added this feature [fast-forward]; we then stole it," says Mike. "It was brilliant. Newer versions of *Lemmings* implement this and it's now very hard to play the original Amiga or PC ones without it. When writing games you have a 'process' and a 'draw'. Process moves things around the world, does collisions with things like traps or water and deals with mouse clicks and lemming selection. Drawing does just that: draws *everything* to the screen. In fast-forward mode, we just call the 'process' a couple of times instead of once, and hey presto... faster lemmings. While this does slow down the frame rate, because everything is moving so fast, you don't notice."

What also stands out regarding *The Tribes* are the huge array of skills available. In order to fit in with the levels, the skills were themed: space would feature jet packs and gravity boots, sports levels featured hang-gliding and surfer skills, while Egyptian levels had platform builders and attractors. The animations were quite effective despite being small, with jet pack lemming proving one of the trickier ones to get the movement right.



» In the *Lemmings 2* intro, the little guys appeal to your very soul. No pressure then.

"Gary spent *ages* doing the fan animation and designing it so that it sped up and slowed down just right and at any point, whereas the animations themselves were pretty simple," recalls Mike.

Some skills worked well (there's something endearing in seeing a lemming dive off a cliff or fly across the screen like Superman) but at times there were too many and they were hard to use. Twister in particular, where you used a fan to spin a lemming through the ground, was fiddly despite its effectiveness. Mike agrees that the skills didn't always work as planned. "Loads didn't work: roller, skater, pole vaulter. Puzzles were added to use these skills rather than the other way around. Some worked pretty well such as grower, archer – and all the classic ones. I think there were way too many skills, most of which did pretty much the same thing, while others were pointless. Roller... why?"

Despite the sequel not gelling together as well as the original, Mike has a particularly memorable time of





"IN THE END, LEMMINGS 2 HAD SOME GREAT TECH, BUT THE GAME WAS OVERLY COMPLEX." MIKE DAILLY



» Loch Ness, complete with monster, is just one of the imaginative locations in the world of *Lemmings 2*.



» Some effective rope skills are required to make it through this level.

his work on the SNES conversion which, interestingly, is far better than its Amiga and PC counterparts. "During *Lemmings 2* I had quite a bit of extra time due to a screw-up at Psygnosis, and I got to put in some great touches that makes the SNES one a step up from the others. Each level was tweaked and improved, including parallax backdrops to the game which added some real depth, and I even added snow to the polar levels! I had so much time, I played with the super scope and put in a cheat where by if you plug it into the second controller, you could shoot the lemmings! That was great fun! You could also switch on visual sound effects: little bits of text were drawn over the lemmings like speech bubbles."

Although the sequel never captured the magic of the original, it still manages to be an enjoyable game today. Upon being asked how the sequel was received, Mike feels it was praised a little too much at the time. "I suspect that many folk were so keen to get a new game, they didn't

look too closely. I never thought it held together as well as the first, although I liked the tribes and different styles, not to mention being able to jump back and forth when you get stuck on a level. There were some good reviews, but none of them really hit the heights *Lemmings* did – which isn't really a surprise, I guess. In the end, *Lemmings 2* had some great tech, but the game was overly complex."

A NEW GENERATION

By the time the third game in the series came along, change was underway at DMA Design. A new team was focused on *All New World Of Lemmings*. This time the game focused on three of the tribes – Classic, Egyptian and Shadow – with a huge reduction in skills. Further games following the other tribes were to be released, but the licence for *Lemmings* was sold to Psygnosis, meaning this concept never reached a conclusion. Instead, an assortment of spin-offs emerged including *Lemmings Paintball*, *Lemmings Revolution*, *Lomax The Lemming* and the ludicrous *Lemmings 3D*. "There were significant control and lemmings graphics changes for *All New World Of Lemmings*," remarks Gary. "I didn't have involvement in *Paintball*, *Lomax* or *Revolution*. *Lemmings Paintball* was written by Russell Kay at his new company Visual Sciences, while the *All New World Of Lemmings* was written back at DMA – the team were new boys but still had Dave behind the helm and Gary drawing the lemmings. *Lemmings Revolution* was pretty nice-looking but still the same basic gameplay, and none of us were involved in it – same goes for *Lemmings 3D* (except for the 'pretty nice' part). Once Psygnosis bought the rights from DMA, they went their own way and did various games with the characters – *Lomax* being another."

Neither of the creators were particularly impressed with *Lemmings 3D*. "I didn't

play it much," admits Gary. "I thought it was a brave attempt but I felt the fundamental core of the game of digging or building across the landscape to rescue the lemmings didn't need an extra dimension. The 3D levels required a new way of thinking compared to the 2D game which I think was maybe the problem for some players," he explains rather diplomatically. Mike is a little more forthcoming: "We had nothing to do with that one, it was badly thought out and plain rubbish."

Yet, for all the ill-advised follow-ups to the original, *Lemmings* is still fondly remembered for the cute appearance of its characters and for some of the most fiendish levels ever created. Gary Timmons sums up his thoughts on its popularity. "It was quite a unique concept: the save-'em-up! It appealed to a wide audience and had some nice quirky features. There was a lot of humour in the game – including an image of lemming paw prints to signify the pause option. It was done at a time when development was less formal and we were just a small team, so we had a bit more liberty to design as we went along. It was fun to work on and I'm pleased that many people liked it."

Acknowledgements to Mike Dailly's website for some of the images. Visit http://www.javalemmings.com/DMA/Lem_1.htm for even more lemmings info.



» The twister lemming: effective but at times difficult to control.



THE STORY OF THE TWELVE TRIBES

Many games generate merchandise throughout their life span, whether it's badges, T-shirts or mugs, and *Lemmings* isn't an exception. Some of the more interesting items have been books released to coincide with the games. An *Official Companion* book written by Mark Tsai and AJ Aranyosi contained detailed walkthroughs for each level in *Lemmings* and 16 levels from *Oh No! More Lemmings*. One book, which we have a copy of and is a nice item for collectors, is *The Story of The Twelve Tribes*, written by Richard Bittoliffe and illustrated by Dave and Sue Rowe. The book sees the Chosen One, Jimmy McLemming from the Highlands, visit the other 11 tribes and inform them of their need to evacuate from certain death. Humorously written and illustrated with cartoon artwork of the different tribes at work, it's a nice companion piece to the game.

