

Well, we couldn't help ourselves. Last month we brought you the first instalment of the Batman Diary. This month we decided to go one better, and bring you the gossip on Lemmings as well, courtesy of its programmers (Alter Developments). So, here's the Work in Progress section — we hope you find it interesting and informative. Oh, and there's a mystery prize for anyone who can suss out Roy Bannon — he's a complete loony.



The Programmer

THOMAS MITTELMAYER is the guy who manipulates all the bits 'n' bytes in the right order to ensure those Lemmings walk across the screen.

THOMAS: After long (and tedious) discussions with the rest of Alter Developments, we all agreed that I was the best man to do the job. The first thing I did was try out different ways of scrolling the background. I made six demos and then chose the best one — a sprite multiplexer for the background, with the Lemmings 'bobbed' in characters. This method of scrolling enabled me to have 100 of the

Level 1 This should be a doddle

Number of Lemmings 25

50% To Be Saved

Release Rate 50

Time 4 Minutes

Rating Tricky

Press button to continue



THE MAKIN' Lemmings

furry fellas walking around at a reasonable speed, but on the other hand this meant the actual playfield would only cover half the screen — it's impossible to have more than eight sprites alongside each other. Having chosen this way of scrolling, I started to program the bob-routine using Lemmings converted from the original Amiga game. When I got them walking, I finished six demo versions which were sent to Psygnosis. When they saw how brilliant the demos were, they offered us the contract — you could say I was one of the happiest men on the globe.

After this brief moment of joy, I had to return to reality and consider the daunting task of creating Lemmings on the C64. My biggest enemy was the memory. Try and fit in 120 animations, background graphics, music and sound effects into 64k of memory and still have space for your code — somehow, I've managed to do so. All the animations featured in the Amiga version can now be admired on the C64 version as well.

Unfortunately, not everything from the Amiga version could be retained — the level size for example. In the 16-bit version of Lemmings, the levels can be up to five screens wide. You could do the same on the C64, but the five screens would fill up the entire memory — so each level had to be reduced to a maximum of two screens. On a more positive note, I managed to save enough memory

to include the 'LET'S GO' and 'OH NO' samples.

Another problem was speed. I needed a routine that would enable 100 Lemmings to be on screen and check whether they were climbing, digging, blocking, or any of the eight functions they're able to perform, as well as their basic movement — they had to be walking and falling at a reasonable speed too. This was probably the biggest reason for me to choose the sprite-scrolling method, as this doesn't slow the computer down as much as the usual scrolling method.

The biggest help with programming Lemmings was my computer set-up; instead of using only one C64, I linked two together. In the past, I've connected the C64 with a 0-modem link, programming on one and transferring the data to another, to see the result immediately. Nowadays, I've got rid of the cable and use my only working disk drive (the one Remi gave me doesn't work properly) as source for both computers. It's much faster to save the data from my programming computer to the drive, then switch to the test computer and load the data from the drive. Another big help was the turbo assembler Jeroen Tel rewrote. Instead of the usual 4000 lines, this assembler enables you to program up to 8000 lines and is still compatible with my computer link-up (coz Jeroen uses the same one). You might

LEMMINGS AT PLAY!

This shows the rate at which the Lemmings are released and the percentage which need to be saved.



CLIMBER — Enables a Lemming to clamber up a wall.



FLOATER — A nifty umbrella that will slow down a Lemming's descent should it fall from a great height.



EXPLoder — Use this on any critter and watch what happens when the time limit expires.



BLOCKER — Acting as a barrier, a blocker can be used to stop a Lemming walking past.





BIG OF

wonder why this turbo assembler can handle twice as many lines as any other — well that's the down side of it. Jeroen removed all utilities which can be found in 'normal' assemblers. With the Lemmings code already exceeding 5000 lines, I'm glad that JT made this editor — otherwise, it'd take me even more time to program all those routines.

But hey, I've been having great fun being the one responsible for programming Lemmings (especially when the cheque arrived). It's the best project any C64 programmer could wish for. Everybody said it was impossible, and voila! I'm making it possible!

The Graphicer

The second man employed on the Lemmings project was NIKAJ ELJK — he was to be responsible for all the pixels drawn in the game, the one who shapes the Lemmings and the assorted backgrounds.

NIKJA: When I was asked to do the Lemmings graphics by Alter Developments, I was delighted to have it as my first BIG project. Until then I'd only drawn graphics for some budget games. All the graphics are converted from the Amiga version by Remi, and we were lucky in that the 120 animations came through very well, only requiring some minor patching up. Due to the different graphical resolutions between the C64 and Amiga, such animations tend to become unusable after they're converted. But everything worked brilliantly — the backgrounds being somewhat bigger, transferred particularly well.

The first thing I did was to create a library with

all the recurring objects and animations — such as the entry and exit points. With these completed, it meant I could focus on the backgrounds more — there was a lot to work on. Rocks, columns, bricks and other stuff needed to be created — and created well.

Problems occurred while re-designing several levels. On the Amiga, levels could be up to five screens wide, while the maximum the C64 could cope with was two. Because of this, I had to cut out all the unnecessary parts and if the levels still exceeded the maximum of two, I had to redesign and make sure the solution would be the same as the original Amiga level. I found this a real pain with some levels, but luckily most of them could be compacted onto two screens. Animation presented another dilemma, as the C64 screen is built up with characters. Each character is 4 pixels wide and 8 pixels high, the screen is 40 characters wide and 24 characters high. I needed to draw the animations pixel-perfect so they'd fit exactly into a set amount of characters. If not, it would be impossible to include all the animations. This isn't merely necessary for the water and lava, but for every single moving object — such as traps and the entry and exit-point graphics. I can remember drawing several levels and when finished I'd tested them, only to find that several items were placed wrongly and had to be moved several pixels. This sort of thing gets really annoying — especially when you've just finished a difficult level. Speaking of difficult levels, I found the fire and lava stages the most taxing to work out. I only had three colours at my disposal (I needed at least four or five) but I tried my best and I'm quite proud of the result. Another annoyance would be the amount of times I needed to alter a level. Every time I finished a stage and passed it over to Thomas, he'd call me to make some 'small' adjustments. Sometimes, I'd get handed a level back three or more times. The biggest slip-up was when we actually got to playtest 15 levels put together for the ECTS in April. I used black in the backgrounds as a fourth colour, to give extra 'dimension'. However, Thomas programmed the Lemmings to fall down if they walked over a black spot, so the result in some levels was that the Lemmings got stuck in the background, due to my usage of colour. Rectifying that little error was the hardest task of all. Thankfully, the demos were accepted very well at the show and the whole of the Psygnosis crew were very impressed.

My favourite stage is the BEAST level. Here, instead of the usual Lemmings screens, I used graphics from other successful Psygnosis games — one of them being *Shadow Of The*

Beast. This refreshing graphical style makes for a very special level.

At first, I found Lemmings to be the ultimate project, but now I've worked myself halfway through it, I've realised it's also my most challenging project to date, especially considering the limitations I've got to work with. Still, I think I'm doing a great job, and I'll gladly finish it.

The Musician

As Alter Developments didn't have a musician, we enrolled another freelancer to work on the Lemmings project. And who would be suited better than JEROEN TEL? Jeroen accepted our offer, so everything you'll hear while playing Lemmings will be done by the master himself.

JERON: When Remi asked me to do the music for Lemmings, I was working on a CD featuring Nintendo game music. I've been working on it for months, but took a break especially to do the Lemmings music, and I've been doing it with great relish — I didn't see much of a problem in adapting the original Amiga music and converting it to the C64. I'm trying to make the music as cute as the Amiga tunes, but I'm trying to make them 'funkier', as I feel the simplistic style of the Amiga wouldn't quite have the same effect on the C64 — although I'll try to keep them as sweet as possible. One thing's for sure — it's going to have that 'MANIACS OF NOISE' touch, like my other soundtracks have. Another point is that I'm limited to using the SID chip sounds on the C64, as well as having to compensate for other '64 limitations (or possibilities, as I would say) in speed and memory. However, recently I was 'given' some extra memory by Thomas for the sound effects. This enabled me to use digital SFX, such as the famous Lemmings samples — in particular, 'LET'S GO' and 'OH NO!' throughout the game. This means the sound effects are combined SID-sounds as well as digitised sounds.

When I'm making game music, I try to adapt it so it enhances the game as much as possible. In my opinion, the correct music and FX make half of the game. If both are linked perfectly, it makes the end product so much more playable. We all know how irritating bad music can be, or even worse... bad FX. Instead of turning the music off, I'll try to make you turn it up louder.

I've done a lot of music, for a lot of BIG titles, but you can only wish for a title such as Lemmings. It must be the most eagerly-awaited game on the C64 at the moment, and I'm so pleased that I'm doing the music for it!

Next month the diary continues with another in-depth look at programming pleasures and pains as more stages of Lemmings near completion. Well, that's what's supposed to be happening, anyway. Fingers crossed, eh readers?

BUILDER —
Gaps in the landscape can be bridged via these plates.

BASHER —
Bash through any obstructing blocks with this super smashing icon.

MINER —
Turns a Lemming into a pick-axe wielding miner with the ability to dig diagonally down.

DIGGER —
Select this and use it to burrow vertical tunnels straight down.

In the finished version, this symbol will pause the game when activated.

Available in the final version this will allow all Lemmings to be simultaneously blown up — sounds fun!

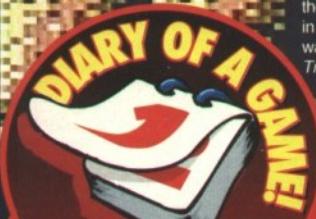


THE MAKING

After last month's instalment, our Dutch programming friends experienced a few problems. REMI EBUS reports...

REMI: In the last issue of COMMODORE FORCE you read about the team's first impressions of the *Lemmings* conversion. Everything was still going smoothly and without any major problems...

You can probably already guess what I'm going to say next... major troubles! Basically, our graphicer — Nikaj Eijk — wasn't doing his part of the job. You may have read or heard the rumour(s) about other potential productions involving Alter Developments (now called E&E Software Company) such as *Zool* and *Troddlers*. Well, we're still looking for a company interested in publishing *Zool* on the C64, but the problem in question was *Troddlers*.



PART TWO!

At the Spring ECTS show in London, we agreed to do *Troddlers* for The Sales Curve as it was a *Lemmings*-clone of sorts (we even had to change our contract with Psygnosis to enable us to work on *Troddlers*). A representative of The Sales Curve promised to send out a copy of the game, which we would use to make a few small demos — as we did with *Lemmings*. But

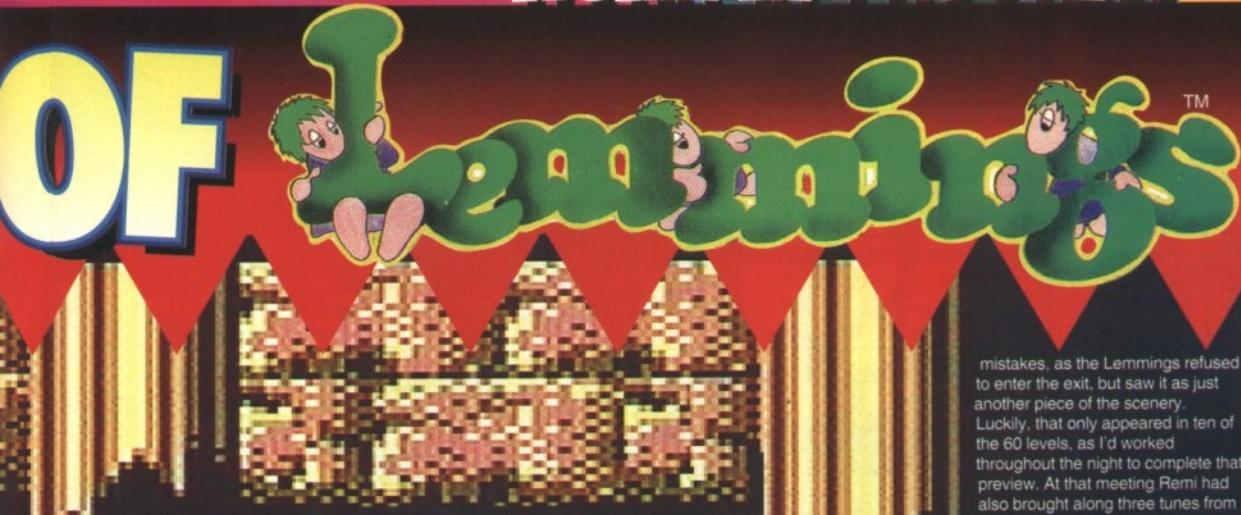
The Sales Curve didn't send us a copy of their

game; several puzzled letters and phone calls resulted in complete nothingness. But we were still interested in the game as we felt it had some potential, so, half a year later, we decided to make a demo-version of a five-level Amiga demo of the game. A week later we got up to 40 Troddlers walking around in a very early version of the game, and then sent our efforts to The Sales Curve. Their feelings on the demo were included in a small letter that stated they weren't interested with a C64 *Troddlers* project; but a few phone calls later we knew better.

It seemed that another (Dutch) team were also working on *Troddlers*. That team had already been

offered a contract, but if we





could come up with a better version of *Troddlers* than theirs — before they had signed up — we could conceivably been given the project. However, the contract offered didn't give us enough security to continue — even if we had made a superior version in the short time scale available, we'd have only been paid royalties (a percentage for each sold copy of the game) and no advance. So we decided to drop the *Troddlers* conversion.

All very interesting isn't it? But why all this in a *Lemmings* diary? Well, we knew the other team and guess who was doing the graphics for *Troddlers*? Nikaj Eijk! Not only did he snatch a conversion away from the company he worked for (at that time still Alter Developments), he also was working on another game while he should have been working on *Lemmings*! I don't think anyone could imagine how angry we were with Nikaj at that time! Our first intention was to completely abandon Nikaj, not using any of his graphics and not paying him a single dime.

But if we had done that, *Lemmings* would've been delayed even further, so we decided to use the levels he'd already finished at that time, and divide the rest of the graphics between several other freelance graphic designers, which seemed to work initially. However, only two of the five new graphic designers actually did anything — namely Alain Jansen (intro graphics) and Leon Van Rooy (level graphics) — so the

Lemmings team currently looks like this:

Programming: Thomas Mittelmeier

Music: Jeroen Tel

Graphics: Leon Van Rooy

Intro Graphics: Alain Jansen

While we would have finished *Lemmings* 2-3 months before the official deadline we're currently a month behind, but both ourselves and Psygnosis are both

confident that we'll have *Lemmings* finished in the very near future (and that's the VERY near future, I hope). Enough stories (read: excuses), let's hear what the team has to say...

THOMAS: This has been a relatively quiet period for me, as I've had to wait for graphics which, obviously, were delayed after the incident with our former graphic designer. But don't think I didn't have to do anything for ages; one of the first things I did was to improve my level editor, and it's now at its very best. Now I can edit an average level in ten minutes! But I also improved my main routine several times in my quest for extra memory — I'm always glad to get some extra free bytes to fill up again.

Several extras I'd planned to include at the outset of the project never got a chance to be featured. For example, when a Lemming explodes on the Amiga it'll split out in several points which fly through the scenery (quite cool actually). In the beginning I planned to include that, but, due to memory restrictions, couldn't. I also discovered *Lemmings* has an end-sequence: a picture of a Lemming surrounded with pictures of DMA Design, the team responsible for the original *Lemmings* on the Amiga. There was also a digitised sample of the team clapping their hands and cheering about the fact that you'd made it through all 120 levels, so that has to be included as well...

A few weeks ago (at the time of writing), Greg Duddle — the producer from Psygnosis — came over to the Netherlands, so I had to edit all 60 levels we'd finished at that time. You see, when I showed some of them to Greg, it seemed that I'd made a few

mistakes, as the Lemmings refused to enter the exit, but saw it as just another piece of the scenery. Luckily, that only appeared in ten of the 60 levels, as I'd worked throughout the night to complete that preview. At that meeting Remi had also brought along three tunes from Jeroen for *Lemmings*, and they sounded brilliant! I don't know if you've

ever heard the Amiga music, but it's rather (read: very) simplistic, but Jeroen managed to add something special to make it sound a lot better while still keeping the cuteness necessary for *Lemmings*. I can't wait to hear the rest. Well, I'm off — I've just noticed (yet) another bug...

LEON: When Remi called me and asked if I'd like to work on *Lemmings*, I was over the moon — things had been a little quiet at the time. I was very happy to do some game work again — especially as it was *Lemmings*. When I got the Amiga graphics and the converted C64 ones, I immediately started work. To date, my favourite levels are the ones we named 'The Blue Levels', with their light, blue and fleshy rose colour combinations. These also feature the green jelly (no, not the band!), which I've changed so that they now, in my opinion, look even better than the Amiga version! When I'm in a good mood I'll complete three levels a day, but believe me — drawing the same kind of pictures day-in and day-out soon becomes tedious. But still, when the *Lemmings* graphics tend to get on my nerves, I switch to drawing something else, or thinking that every day the completion of *Lemmings* draws nearer and nearer...

Well, that's it for *Lemmings* this month. Jeroen Tel was too busy working on his new CD (mentioned last issue) to contribute to this issue's diary — apparently, it's going to be excellent. That aside, there's great news for mouse owners — *Lemmings* will be compatible! According to Remi, it plays like a dream using one, although that's not to say it doesn't work well with your standard joystick. Until next month, then...

THE MAKING OF LEMMINGS

Disaster! We've always considered ourselves unlucky where deadlines are concerned, but everyone spare a thought for poor old Denton Designs. Another project they're working on has been rescheduled, meaning they've had to work night and day over the past month to get it out on time. In real terms this means... no Batman diary this month! Sorry folks. Oh well — you'll just have to make do with our EXCLUSIVE Lemmings diary...

REMI: At the time of writing, the very last alterations are being made on *Lemmings* — with any luck it'll be on the shelves by the time you get to read all this! So go out and look for it... oh, and don't forget to buy it too!

Lemmings has taken me roughly two years to complete. I first talked

with Psygnosis about the C64 conversion of *Lemmings* at the 1991 Autumn ECTS show, and it took exactly one year for both parties (E&E Software and Psygnosis) to sign the contract needed for the conversion. It then took us another year to complete the game. During the last few months I've been very busy travelling between all the persons involved, making sure everything was delivered on time (something I obviously completely failed) but right now there's only one more visit to do (or two, or three... whatever) to be the first person with a completed version of *Lemmings* — boy, will I be glad it's over! You may think it's great to produce a game and see it grow and progress. Take it from me — after a few months you consider it your job, instead of your hobby, and in the end you feel glad when you finally finish the game. Still, the most recent sections I've seen are nothing short of brilliant — it's without a doubt the best 8-bit version ever made, and even gives several 16-bit versions a run for their money. This is going to be THE smash hit for this Autumn/Winter — as well as 1994, 1995... and so on! When I last called the Rowland Brothers, they mentioned *Mayhem In Monsterland* is nearing completion as well — as funny as it may seem, both the games will be completed at the very same time! But (hopefully) Psygnosis will be a bit faster with the duplication and distribution of the game, which gives us a (small, but important) head start. The coming

months will be very interesting for both the teams —

which game will top the charts? Obviously, I hope it'll be *Lemmings* — but 'hi' to John and Steve, anyway.

THOMAS: This month I've been doing some last minute checking on most of the routines, as well as finishing the intro. It's almost exactly the same as the Amiga version, but because of memory limitations there aren't as many Lemmings falling out of the balloon. In the Amiga version, the balloon scrolls onto the screen before the Lemmings drop out, but on the C64 it'll be on the right spot from the beginning. Of course, the most obvious change is at the end of the intro — on the Amiga, the screen zooms out to show the *Lemmings* logo. This zoom alone would fill up the memory of your C64, so I decided (wisely) to swap the pictures instead of including the zoom. I also had to change some of the graphics due to memory restrictions, as the animations started to take up too many sprites — in the end, I had to rearrange some of the frames of animation Allain drew. The sprites are made up of two parts. The first layer is in multicolour low-resolution and features the colours blue, pink and green but is rather blocky. That blocky bit is removed by the second layer which is placed over the first one; it's single colour hi-res, and a lot smoother. The actual animation is now drawn in black-lines — just like any cartoon you see on television. By putting the second layer over the first one (perhaps that's why they call it overlay-sprites) you get the colours of the low-res sprites, and the smoothness of the hi-res ones. The only negative point of this technique is that it uses twice as many sprites as it would with the low-res ones.

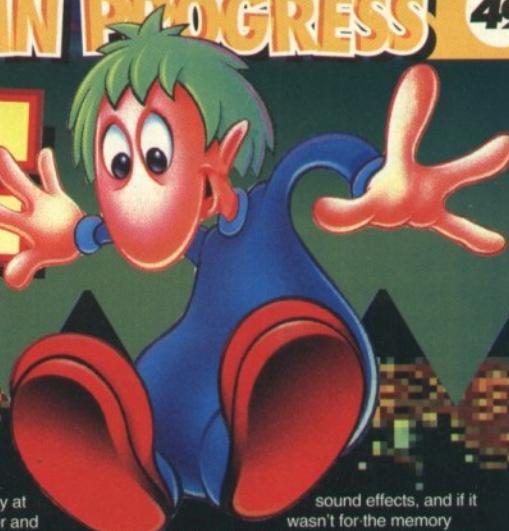
Another thing I've been working on is the loader. I've had no problems with the disk loader, as I've programmed disk-based games before, but as we're catering for tape users as well I had to look for a tape



PART THREE!



ING OF



multiload too.

After some deep digging, I finally found an old tape loader called 'ABC Turbo', written by some dude from the PD scene. I've now come up with a very short routine which should work perfectly for *Lemmings*. Now I only have to write a small tape mastering program to convert the disk version to tape.

The only thing left for me to do is the end-sequence, which we discovered when we had the game half-finished. The original Amiga sequence features a picture of a lemming surrounded by digitised pictures of the team responsible for the game (DMA Design, fact fans), as well as a sampled applause — we decided to do the same, but with our pictures. After we'd took photographs of ourselves standing around a box (which doesn't even slightly resemble a lemming, but was the first thing we found that was the right size after Jeroen's cat escaped) we spent the rest of the day sampling our cheering, clapping, stamping and whistling — the result is great! But you have to work yourself through 100 levels before you can witness this marvellous piece of programming (heh heh!).

Anyway, despite the fact this conversion's been a real pain in the ass for me, it'll be — without a doubt — the most technically-advanced C64 game ever, and certainly worth the trouble...

LEON: My most important work this month was the menu, as it had to look great and be finished quickly. I'm happy with the end result — it's fully animated and exactly the same as it's Amiga counterpart. Well, to be honest, not *quite* exactly. On the Amiga there's a scroller at the bottom of the screen, activated by two small lemmings turning a wheel which makes the scroller... erm... scroll. The original idea was to include them, but to do so I had to have the original lemming animations.

Predicably, these are

around 200 kilometres away at Thomas' place — to go over and collect them would take too much time, so we decided to leave those out and have an 'automatic' scroller. You probably think my job's done, but

that's not the exact truth, as I still have to do eight more levels to complete (don't tell anyone!) but Thomas assures me that they shouldn't be a problem with his editor. Once I've finished those, I can finally start working on the last two pictures for *Lemmings*. Lemmings has been an experience for me, as it's the first big (and I mean BIG) project I've been involved with. If you compare C64 *Lemmings* with other 8-bit console versions... we've wiped the floor with them. I'm looking forward to doing more work with the Commodore, y'know...

JERON: I'm very happy to have worked on *Lemmings*, as it's THE most eagerly-awaited game on the C64. And I'm impressed by Thomas, as out of all the people to have worked on *Lemmings* he's

the one to have made the impossible possible! My job was to convert the music — something I've done for a lot of games — but you won't find my best work in *Lemmings*. It's not that I haven't done as much as I could, but let's face it, it's conversion work — something that would limit anyone. In total I've finished nine level tunes with

sound effects, and if it wasn't for the memory restrictions I would've produced some 'Let's Go' and 'Oh No!' samples as well. All the tunes are conversions of the Amiga music, but only use two voices, as I had to leave the third voice open for the sound effects. I still think I've done a good job...

Sadly, as the music is the smallest part of the game (I get equally well paid though, heh heh) there's not much else I can say — oh, and I've to pack for a small business trip right now. To me, *Lemmings* has been a fun project to do, and I'm proud to have my name in the credits.

REMI: Well, that's the end of the third and last part of the *Lemmings* diary. I'd like to thank all those who have been involved in its production, but limited page space stops me from doing so — the list would easily need an extra page. I'll just leave it with the man who deserves it the most, a man who has done everything possible for us and the conversion of *Lemmings* — Greg Duddle! He's the producer from Psygnosis, who's had to listen to all our excuses, delay lies, stories, and much more, while having to report all that to the big bosses — in other words, his ass was on the line if we decided to take a vacation to Hawaii instead of working on

Lemmings. So a very big thank you to Greg, and a very big goodbye to you readers. See ya!

All good things come to an end, but wait — it's not over for *Lemmings* yet. Next month we'll have a massive review of it, so restrain any suicidal urges 'till then, okay?

REVIEW

**COMMODORE
FORCE**

HURRICANE HIT!

It's been a long time coming but finally MILES 'LEMMINGS'? HERE? I DON'T BELIEVE IT! GUTTERY bids a belated welcome to one of the most original games in years. Was it worth it? Read on and find out.

● **Psygnosis £******

Ah-ool Lemmings is finished at last! What can one say about this one that hasn't been said before? A hundred levels of traps, ravines and retarded rodents, complete with jazzy green hair and blue pullovers.

Actually, I'm perched on the horns of a dilemma here. Traditionally, a review begins with a rundown of the plot, brief appraisal of gameplay and finally a critical conclusion weighing up all good and bad points to justify a final percentage. Unable, as I am, to believe there's an individual unfamiliar with this game, I'm left in the unfortunate position of having the easy two-thirds of the review rendered useless. Hmm — what to do!

I could waffle on about nothing to kill a few hundred words, that'd be easy enough, but no! Am I not a professional? I shall treat this situation as a challenge. I shall write in an amusing and informative



Believe it or not, that horrible mouth thing is the exit in this instance. Rather them than us; its breath probably smells!

C-FORCE No.12 NOVEMBER 1993

“A timeless piece of software”

way without straying from the point. So, in reverence to those immortal words — 'Let's go!'

You're greeted by an animated sequence identical to that found on the 16-bit versions before yomping confidently onto the options screen. Choose music or FX and start difficulty (Fun, Tricky, Taxing or Mayhem) or enter a code for a specific level. Then it's into the classic puzzle-action.

Lemmings demos have floated around in various states of completion forever, or so it seems, but the final game still appears fresh and lively. Background graphics fully capture the flavour of

each level with well animated sprites striding around as smooth as you like. Characteristically fine Jeroen Tel toons bounce along so jauntily you hardly notice the lack of those famous samples.

Where things could've become tricky is in the joystick control. A mouse allows you to move almost instantaneously from one part of the screen to another — essential in such a game. To avoid unnecessary fiddling around, actions are highlighted by using the number keys.

Suicide is fun...

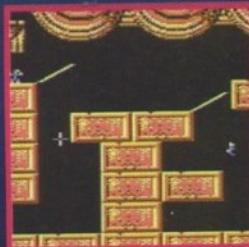
To make things easier still, it's possible to scroll around and select icons while paused. This means

relative immobility of the joystick and attribute problems are all but eradicated.

Things tend to slow down a tad when there's a lot of activity but this almost seems a blessing, giving precious extra seconds to gather your thoughts. To keep things running at a decent rate, the play area is only about half a screen wide — a little disconcerting at first but fiendish, addictive play soon diverts your attention.

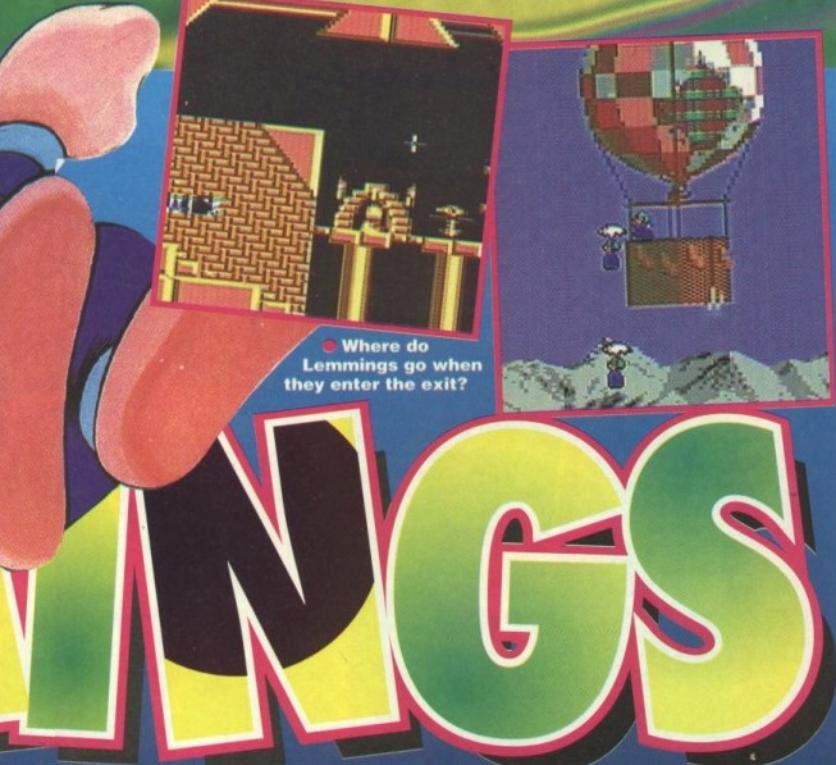
So the compliments are out of the way, now for the fun part — the slagging (cackle!). For a start there's, um... and then there's... Great Scott! There's really nothing to fault!

● **Bye bye, Lemming! Prepare to splatter...**



Horrible hard stuff that Lemmings can't dig through. At least it doesn't kill them...





• Where do Lemmings go when they enter the exit?



• A Lemmings orgy. Well it's got to be, hasn't it? What else could they be doing?

I could gripe about the fact there's never more than thirty Lemmings to a level, but that would over-complicate things. Okay, here's one that never fails — multiload. Get outta this one, Alter Developments. Oh no (no pun intended, honest)! Lemmings has the least officious multi-load in history, because when you reach a level, you stay there until it's completed.

All right, so loading's bit of a drag at first, as early levels are so simple, but once you get into the tougher ones it fades into insignificance. Just remember to write down those passwords and make a note of each level's position on

• Heh heh! Possibly one of Lemmings' most entertaining moments... the tape counter. C64

Lemmings is a fine achievement.

There's only one thing that really goes against it: the timing. The original game's been popular for nearly four years, so the whole thing's just a bit old hat. There was even a Spectrum version way back.

Recent 'Work In Progress' features gave some reasons for its delayed C64 debut, but the question remains — do we still need Lemmings? In my opinion (and that of most readers, judging from the mail we get) the answer is 'yes'. It's a classic, totally original when first released and nothing's come close

since. Even Lemmings 2 on the Amiga doesn't have the same charm as its predecessor.

C64 Lemmings a spot-on conversion of a computing legend. Don't leave home without it.

The exit. This is where Lemmings should be guided. What lies beyond is a mystery to us...

The bows signify this rock can only be tunneled through in one direction...



MILES! 97%

JAMES!

• So it's arrived, then? One of the most talked about — not to mention original — games of all time, Lemmings is something else. You could shove it into a category, call it a God or strategy game, but it's still the nail-biting amount of playability that makes it so special. Unlike the Spectrum version, C64 Lemmings has up to the maximum 100 potential suicides of the Amiga version on-screen at any one time — Sir Clive's little baby could only handle 20. It even sounds well; Jereon Tel's marvellous tunes are, although a wee bit cute, nevertheless very listenable. In fact, I'm so impressed by '64 Lemmings, I'd go as far as to say this is the best 8-bit version I've seen — even its multiload is bearable. In fact, why are you reading this now? Why aren't you nipping out to buy it? Miss this, and you're letting a piece of software history pass you by.

97%



GALE WARNING

PRESENTATION	FAITHFUL TO THE 16-BIT AND NO-PROBLEM MULTILOAD	85%
GRAPHICS	NEAT SPRITES AND SUPERB BACK GROUNDS	92%
SOUND	JOLLY DITTIES PLAY THROUGHOUT	89%
HOMEBREW	SIMPLE LEVELS GET YOU STARTED BUT THEN...	94%
LASTABILITY	A HUNDRED LEVELS KEEP YOU AWAKE TILL IT'S VERY LATE	95%

FORCE FACTOR 97%



LEVEL 1 This should be a doddle!
Number of Lemmings 25
050% To Be Saved
Release Rate 50
Time 4 Minutes
Rating Tricky



You can't blame people for being cynical. Convert Lemmings to the C64? Impossible. Or so it seemed. E&E software's conversion of the original Amiga classic is every bit as good as we'd hoped it to be.

E&E Software (formerly Alter Developments) have just put the finishing touches to *Lemmings* — possibly the most hotly-awaited title for the C64 in years. Despite endless deadline extensions, controversy and, of course, the departure of Nikaj Ejik, they've managed to make it — in our opinion — the best 8-bit version of the DMA Design(ed) classic. After all the ifs and buts, it's finally ready, but, with the benefit of hindsight, would the team do anything differently?

'I would've seen to it that the communication between the members of the team — and Psygnosis — would be better,' admits Remi. 'I'm sure things could have gone a lot smoother.'

Thomas, on the other hand, is more concerned with the technical side of things. 'For a start I'd

THE MAMMA LEMMITS

have used a PC with Cross Assembler and port everything down to the C64, instead of the four C64 set-up I'm using at the moment.'

But did the team ever have their doubts about the conversion? Were they ever tempted to throw the towel in and call it a day? 'Yes, on times such

as seven in the morning, having worked through the whole night,' reveals Thomas, 'only to find the disk I'd been saving all my essential code on had corrupted.'

Remi, on the other hand, reveals a more optimistic attitude. 'Not really. Of course, there were moments where things just didn't seem to go the way we'd have wanted them to go, but I never stopped believing we were able to pull it off.'

Jeroen sums it up in a single word: 'No.'

We asked the team about the biggest problem they encountered during production. 'Squeezing as much as possible into the memory — every bit is used,' says Thomas, with Jeroen also having suffered technical difficulties. 'Separating the audio data from the audio driver,' explains the tunesmith. 'Usually these are loaded into memory at the same time. In *Lemmings*, the driver is loaded once while the data is loaded in every level. This was needed to save disk space.' Thomas' response is a little



Leon:
Graphicer

Jeroen:
Musician

Remi:
Remi!

Thomas:
Programmer

THE DAILY DESIGN

The man behind *Lemmings*, so to speak, is an individual known as Mike Daily of DMA Design. We asked him how the idea was formed, to which he responded: 'This one's in the history books by now, but if you've lost yours I'm sure I can let you know...'

'One lunchtime around August 1990 I was occupying my time by creating a small Dpaint animation. It was only eight frames, but had

hundreds of little men walking up to a gun and getting shot. A guy called Gary Timmonds then added some other men, touched up the animations and then we let others see it. Russel Kay — the programmer of PC *Lemmings* and *Lemmings 2* — was somewhat amused and was sure there was a game in there somewhere. He then did some tests — Lemmings walking around, falling etc, and this was shown to Psygnosis at one of the computer shows in London.'

Later, I did some tests — on a C64 of all things — but eventually Dave Jones took up the challenge on the Amiga, and history was made. Did Mike think *Lemmings* would be as

successful as it has been? 'No,' he says. 'Okay, we thought it would be big, but not... BIG!'

Finally, we enquired about Psygnosis' reaction after first seeing *Lemmings*. Mike confidently answers 'If you remember most people's reaction when they first saw it, it was much the same with Psygnosis. One big "WOW, COOL!" You can't really say much more than that, can you?'

Finally, we managed to get in touch with a fellow

MAKERS OF MIGS

more colourful. 'Only having two different colours out of a pallet of four to create a light source on all the objects and grounds.', with Remi cheekily admitting 'Trying to find new excuses to keep Psygnosis happy and interested'!

Obviously, fitting every element of the Amiga original into the C64 version would be nigh-impossible. What where the most difficult compromises Thomas and

Leon had to make as programmer and graphic designer respectively? Thomas answers 'Having to squeeze the five-screen Amiga levels into two screens on the C64 — you could say they're completely new levels. Also having to leave out some levels and traps due to memory restrictions.' Leon, again, is preoccupied with golden hues. 'Creating colourful levels with only four colours,' he says, echoing many a graphic artist's dissatisfaction with the C64's limited palette.

But would they do it all again? Remi's indecisive 'I think so... or...' is a sharp contrast to Thomas' quick 'Get real!' However, Leon's far more positive about the project, responding 'Certainly!', in a similar manner to Jereon's 'Absolutely!'

We don't know about you lot out there, but if this is what the E&E guys can do with their first ever piece of commercial software, we eagerly await future productions...



known as Greg Duddle. He's the Producer of Lemmings, and has been involved with more games than most people have eaten hot dinners. Having heard about E&E's excuses (Remi's in particular), we asked him what it was like to work with the team. 'Remi and the others! Hmmm... although a decent, likeable bunch and very competent on the C64, they were notoriously difficult to pin down to any kind of deadline — "it's almost ready, it'll arrive on Friday etc". Finally, we enquired if working on C64 Lemmings had affected him in any way. 'Aaargh!' he said 'I can't believe it's over!'. Whatever could he mean...?