## The seine!

HBGAMES.org's Official E-zine!

**Realistic Rivers** 

Issue #14 September 2013

**Project Grid** 

Guild Wars 2

Applying it's concepts to an indie RPG



### WELCOME TO HBGAMES

This is the third issue of the current run of the HBGames.org eZine (the 14th overall). It's gone down well, so we'll continue. In this issue we explore popular game Guild Wars 2 and decide how we can use it to improve our own games. We take a look at how to perform simple tileset edits when using other people's graphics. Finally, we take a look at some common errors that rookies make so you won't make the same mistakes.

Welcome to the eZine, and if you're new to the site, welcome to HBGames - we hope you enjoy your stay.

Amy Pond

#### SPREAD THE WORD

If you've got something to say, say it! Writing for the eZine couldn't be simpler. Just write your article and send it, preferably as plain text with links to any images (and credits for them), to **Amy** via the forums. Your article will be edited for spelling and grammar and to fit the issue. You will receive credit any way you ask for it.

If you know someone who might like to read the eZine, feel free to spread it around, or reupload and distribute the image file (fully intact) any way you like.

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## Realistic Rivers

I'm sure everybody has done history and geography at some point in school, but for those who haven't, or those who just forget when it comes to designing, writing, and mapping out their games, I thought a good idea for a column in the eZine would be a look at RPG gaming from the perspective of both. Now, I took History at A-level, and Geography at GCSE, but the things we learned were certainly useful enough to apply to a game – designing coastlines, kingdoms, and even weapons for the character to use.

In this issue I want to discuss rivers. While you might think it pedantic and a waste of time to spend time designing them properly, it can actually lead to some interesting land formations that otherwise might not have been thought of, making maps much more interesting and that little bit more realistic.

The first thing to cover is what a river actually is: a path formed by water as it flows from a high point to a low point. Actually, the river itself only really becomes a river when several streams meet one another in a significant flow, but the furthest one of these streams can be said to be a continuation of the main river. Basically where you have some land higher than some other land, any rain which hits the land will take the quickest path it can downhill – but only ever downhill and cannot climb along the way. It will follow any route it can to do this. The area in which all water flows into this one river is called the watershed of that river.

So at our beginning, at the source of each individual stream, we have small flows of rainwater sliding down a hill slowly trickling, until it meets more water and becomes a solid stream. This stream, as it moves, picks up rocks and moves them gradually along the surface of the ground. This seems insignificant to begin with, until we realise that over hundreds, thousands, millions of years this causes erosion that eventually leads to great canyons. Normally where a river is younger, say a few hundred years, all we have is a slightly sloped valley or even just river banks in a "V" shape (these are, unsurprisingly, called "V-shaped valleys").



A V-Shaped valley.

I said the water would take the quickest route possible. Not all rock is the same, some of it easier to erode than others, and the ground is not one continuous rock. This means as the water and the rocks it moves erode the land, it does so at different rates, even changing the course of the river entirely as the eroded land allows it to bypass formations it otherwise couldn't – or even making the river several hundred miles longer as the eroded land means it now cannot climb uphill to get back where it was!

Where the land erodes later down the river but not earlier, because of a change in rock types, we get a waterfall. Waterfalls are a vicious circle: as the waterfall gets higher it drops water further so further erodes the land below it. This creates a plunge pool beneath the waterfall that can be several metres below the actual bed of the main river. Gradually the waterfall begins to move backwards as the faster moving water becomes better at eroding the harder rock behind it.

Waterfalls occur where the water moves it's fastest – near the beginning of the river – with some smaller ones mid-way. As the water approaches the coast, further along, it becomes slower but also more powerful.



Vikimedia Commons

As the river is met by other streams it gains more and more water, becoming larger and wider. We've now hit the middle of the river and here it takes the form of a sweeping snake, a little slower than the earlier gushing streams. Here where the land is much flatter the river tends to make sometimes spectacularly meandering turns around the smallest of hills (remember, a river cannot climb, it can only move downhill). You can see evidence of this on a map of Africa, where the Nile turns significantly back on itself part way.



This creates more interesting landforms for us to take a look at and incorporate into our games.

In a river bend, the water moves faster on the inside of the bend and slower on the outside, like a running track. This means it erodes differently. The inside of the bend is gradually, but powerfully, eroded, moving the river over quite large distances over time. Eventually where we have a C shaped curve we end up with an O in the river. I mentioned earlier that the water always takes the quickest path: this means that one side of the O will go unused.

Remember all of the rocks we were moving along with us earlier? Well, as the water is slower at this point, the river cannot hold on to them and starts to deposit them – in it's slower places. In the case of our O, it drops these in the larger curve, and on the edges of the main now straighter flow, cutting off our earlier C and just creating a straight line of a river. This C-shaped water body is called an "Oxbow Lake", and they are very common. The inside of such a lake is a good place to site a town as it's near to the main river, protected by a natural moat, and protected from the river itself moving as it's, for now at least, pretty stable.

Because as it goes along more and more streams will join the river, from the aforementioned watershed, the river gains more volume as it goes along, becoming wider. Eventually it becomes too wide for even bridges across which poses an interesting natural barrier for mapping.

At the end of the river it flows into the sea – and eventually the oceans – called the mouth. This is a good call for placenames around this spot: historically towns and cities have been founded next to rivers and named after features along them. For example, Exmouth is at the mouth of the river Exe, Cambridge and Ironbridge named after bridges on the course of rivers, and small towns such as Penkridge (river Penk) or Exeter also gain the names from rivers, often corrupted over the years by misspellings or just poor word of mouth or language barriers.

It's interesting looking at the world maps of some pretty big games and seeing the glaring errors in their rivers – RuneScape comes to mind which has a river with two mouths! – one of them at the top of a mountain. The laws of physics may not always apply in games, but it can be interesting to try and get them right.



One of RuneScape's rivers begins at the sea in the North at the top of the highest mountain in the game. It then flows down into... the sea! (Image source: Jagex, Runescape.com)

I think a lot of RPG Maker rivers suffer the flaw of their rivers being created by autotiles, or just tiles in general. The 32x32 tiles do not lend themselves well to creating rivers which also have smaller streams tricking into them, and waterfalls are difficult to create in large numbers without them being too spectacular in their nature. We can however create the terrain created by rivers: lakes creating natural moats, large meanders, boulders distributed near the source of a stream slowly rolling down the hillside, and most spectacularly the canyons left behind by rivers many millenia in age.





# 

HBGames, formerly RMXP.org, formerly RMXP.net, dates back to a community centred around popular game making software *RPG Maker XP*, which was "released" (as an unofficial, and illegal, translation) in 2004. RMXP.net built up around it to become the largest English language RPG Maker forum.

This was now nine-and-a-bit years ago, and to celebrate the ten year anniversary of the forum and the software, we want to stage some cool events and get-togethers.

Do you know any ex-members who might want to show up for a short while for a quick chat?

Do you want to reminisce about the old times with some sad loners?

Are you new and just want to know what the fuss is all about?

Also, we want to come up with a *Game of the Year* for each of the ten years as a special feature. We currently have five voted for, so to finish it off we need 2004, 5, 6, 7, and 2013.

To add a bit of colour and celebrate some of the great games made here, there is now a Game of the Year spotlight on the homepage, linking to the five games we voted for.



Finding Project GRID





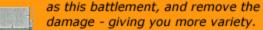
#### **Custom Graphics**

If you can't afford, or don't have the time or acquaintances to churn out high quality graphics, one of the best ways of setting your game apart can be to just edit what you have already. With pixel art this is often called "Frankenspriting" if it is mixing up existing tiles.

I am going to show you how to do basic edits in Microsoft Paint, which probably came with your PC.



These are the tiles which I shall be using, from the RPG Maker XP RTP graphics pack - a clock tower and part of a battlement from the Castle Town tileset. Much of the tiles in the RTP are designed to look a little bit damaged. As an extra assignment, why not duplicate tiles such



The first step when using somebody else's graphics is always to study it for a bit to make sure you understand what is going on in the piece. This is a mere clock tower, but you can see that there are several details going on here. A pedestal base, a brick tower with chimes half way along, and then the clock itself which has a pitched roof and masonry features at the bottom. I looked at this and tried to decide which tiles would benefit my game (it's probably better to work the other way - decide what you need and then make them - but it can be quite fulfilling to create a stock of your own edits just so that your tilesets have more variety. If you save over the RTP graphics with extended tilesets, then any game you make in the future will use those same tilesets - just remember to remove the RTP and import them back in when you publish!

The first tile I wanted to make was a brick wall piece which I could use in any tileset as I quite liked the texture of the clock tower itself. To do this, I used the selection tool after zooming in quite far. It is as simple as carefully drawing around the object you want and then using copy + paste (ctrl+c and ctrl+v) to move it elsewhere in the image.



RPG Maker XP tiles are 32x32 in size, so making texture tiles such as this requires shuffing around.

So long as you make sure to copy the shadow and highlights, bricks can usually be lengthened without much bother - just move the top half and fill in the rest and so on. I was left with this tile at the end of it.



You can probably tell just from looking that some tile bits are repeating, so just shuffle them around a bit to create a less uniform look - that's what I was after, anyway.



This was my finished wall texture tile. I then repeated it over a length to see what it would look like and make sure I was happy with it.



Now that I had a wall texture I wanted to go further. First I removed the clock for a later project. This kind of detail is always useful.



Using my new texture I covered over the chimes, and then copy and pasted the base to create the edge of a stand. I then began to edit the battlement piece to remove the damage to it.



I then began to search for something to place on the plinth, although the plinth itself would make a good addition to the tileset, I found. With a little work it could also be a stone pillar holding up a building entrance.



Use the eye dropper to create a "pallette" - just a series of splodges that you can then use the eye dropper on to keep your colours consistent.



Using exactly the same method, I created a pallette for each part of a soldier from the RTP character sets. I then worked out which shades matched up, as this would be a uniformly coloured character. Using the eraser tool, select with the left mouse button the colour you want to use, and with the right mouse button the colour you want to replace it with. Then erase using the right mouse button, and only those two colours will be affected.



The finished piece. This statue of a soldier would fit in the middle of a small market town maybe it is the statue of a famous general who came from the town or maybe it is a propaganda piece from the big city. Either way, it dominates above the common people.



If detatched right, the clock from above the tower could be positioned on any wall in the town to provide another little piece of detail. Or perhaps it could be turned into a bell tower, pidgeon rest, or other feature. This kind of protruding clock was common in English towns to mark the location of a jewellers specialising in watches, such as Rolex.



## GUILDWAR

Ever since ArenaNet announced that the Guild Wars series would end with Eye of the North, a lead-in to a new series, we've been anticipating the release of **Guild Wars 2.** Now that the dust has settled and we've had a good play of it, how can we work it's ideas into our own games as inspiration?

It seems ever since scripting became available in RPG Maker XP that making an MMORPG has been a dream just in reach of the game makers at HBGames. Some succeeded - others managed to get part way but eventually failed - but all have left with experience of creating and managing MMORPG games. Open-ended worlds, no game-ending, no game-over, and timelines that are mutually exclusive all join together to give an experience very different to a typical RPG game. They're rarely applied to single-player RPGs, but Guild Wars has always bridged this gap, offering intensive solo missions and challenges while still in a multi-player environment.

Let's take a look at some of the concepts GW2 gives us.

#### Levels Don't Mean Jack

I'm actually a little confused on this one. In GW2, there are combat levels. As you go around you raise your level through exp. Exp gets larger as you level up, but the rate of exp that enemies give you also gets larger, as does their difficulty but also your power. In the end, leveling up is just a way of showing how far you've progressed in the game rather than

deciding how hard you're going to find the game. (I'm actually wondering why levels exist in the game at all as like Guild Wars 1, your level doesn't really mean anything at all.)

This can easily be applied to our own games and is something I personally would like to see more of. Instead of enemies getting harder by being more powerful, and the player getting easier by gaining a higher level, instead everything could be on the same level, and "harder" enemies can be more difficult through actual strategy and technique. This would make battles actually involve **thinking**, and turn ordinary hack and slash fight scenes into really interesting puzzles.

#### Fashion is Success

In Guild Wars 2, as in the original trilogy, playing for a long time or severe luck doesn't make you better than anybody else in abilities and equipment, it just makes you look better. All too often in RPG games, a good bit of luck can nab you the Ultimate Sceptre of Ultimateness, granting you a severe advantage over your contemparies. (cont..)

We have a bit of a **HBGames Guild** going - talk to bacon or Amy on the forums if you want to join! There's a **Guild Wars 2** thread in the **video games** board.

#### **INSPIRATION**



Through items such as dyes, showing your success in Guild Wars (or your luck, real world money, or time spent playing) is all about looking good: fashion, different coloured clothes, great looking items, rather than actual advantages in battle.

It makes a lot of sense. Being a little bit lucky, in the right place at the right time, should never grant a player the number one spot. It's no fun if you can win a game by merely getting the right drop. Because ultimately fashion is just fashion and does not affect your ability to play the game, those who want to can ignore it entirely, not being worried about other people being a little prettier.

#### Random Events

You are defeated

By far my favourite part of Guild Wars 2 and the one I would like to see replicated in independent RPGs is it's events. These are random scenarios that crop up from time to time, such as a hoard of centaurs preparing to invade a township... fail to stop their preparations and they will

actually invade - fail to stop this invasion and they'll actually capture the town - you can't even teleport there until it's retaken by the good guys! These events all happen wherever you are in the world and completing or failing one decides what you do that day. Ultimately though there is no "ending", the next day the world is back how it was. The big thing this creates is a huge amount of replayability, which is something that a lot of RPGs lack. Even if you end up playing the same event twice it won't end the same way.

This is especially useful as a mechanic in sandbox or exploration games and it gives the player a reason to hang around in areas which aren't necessarily attached to the main storyline. The dynamic events and the randomness involved means the game becomes much longer for those who want to sit around in one spot and play out events. In short, for developers, it is extended gameplay that involves very little creation on their part. I would very much like to see an indie RPG which utilises the event system of GW2.

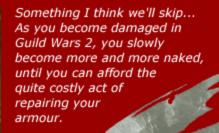
#### Updates not Expansions

This is the tricky one. In Guild Wars 2 there will not be expansion packs or new campaigns. You won't head to the store to buy the next game in the series to get new content. Instead, all new content will be automatically downloaded - and for free.

This is difficult to apply to an indie game, even an online one, but I think it can be done. Whether it can be done well is another question. Autoupdaters are available, and easy to implement, but whether the level of quality updates needed can be sustained is key to this working well.

I personally wish that GW2 would go back to the GW1 model, as I preferred the idea of buying a new game that added onto the existing one but provided all of the content I'd expect from a £30 title. Certainly I'd rather the game be funded by people like me buying the game itself than by other people buying gimmicky outfits and the other items that the now micropayment based game has around.

I guess we'll see in the next year or two whether the Guild Wars 2 model works, and be able to better judge what we as indie developers can learn from it. Until then, happy gaming!





#### Game of the Year 2012

## project GRID

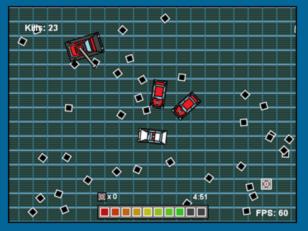
A bit of a confession: out of all of the "Game of the Year" games we voted on, there's only one I've enjoyed enough to carry on playing it, and that's 2012's: Project Grid, created for a contest by messrs Jason and Tuna. From first looks it seems quite basic: a bunch of squares drawn haphazardly on a grid (giving the game it's name), but after playing a few times it's a bit more complicated than that. Each square actually represents a pedestrian (and gives a satisfyingly splodgy blood splatter, ableit also made of squares, when ran over by your car).

The player drives around using a quite slidey, but realistic enough driving movement, around the grid, running over as many poor pedestrians as possible in the time limit. It's not that simple though. In your way are police cars who will ram into you damaging you, and various tanks and other shooters that will blast you off the grid.

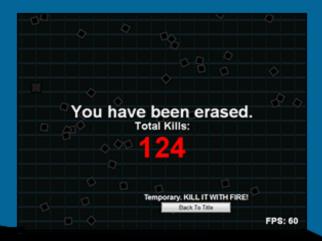
The game features two modes: one timed and one free play, although this is made difficult by increasingly angry enemies chasing after you. There are also various weapons and power ups you yourself can gain, to go after more than just people and shoot the enemy cars down.

Unlike most of the games featured here this is not an RPG, and it is not made in RPG Maker, but Construct 2 (as was the aim of the contest). It's the first Game of the Year not to be made in RPG Maker XP.

Well polished, and easy to play via a web browser (HTML5), it's easy enough to try it out so there's no real excuse. Happy mowing!



Tanks are bad, as if you couldn't guess that. 250 kills is the first milestone and difficult to reach.



Er, yeah, sorry for making a big deal about "Game of the Year". I promise this will be the last.

Except that's a lie. To celebrate 10 years of the community we'll be getting together to come up with one for all the missing years too.

Then I'll stop banging on about it. Honest.



## Spotlight

Promising projects, good reviews, completed games and generally cool stuff from around HBGames.org





Another cute title is **Dora's Adventure**, also found in the completed games section, by **Draf**.

graphical effects.

Starring a bunch of adorable anthropomorphic cats, the mini game is now available to download and play.

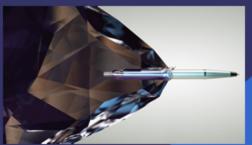


#### SPOTLIGHT

**Perihelion** continues to be too talented for her own good in the artwork forums. The drawing on the right is **Horses in grassland**, and, well, pretty damned good. But it's her painted isometric tiles (below) that I'd like to see in a game.







Pen by **Tomas** 



Spriteset and avatar, Xhukari



Strawberrii



You'll find these beautiful tilesets by **Ellenor** in the resources forum.

**Coyotecraft** has created some nice tutorials in the **RPG Maker Tutorials** board, including how to play Japanese games on an English computer - useful!

Don't forget to check the music forums - for some of our best works which, for obvious reasons, can't

be shown here!











Pokemon by LaDestitute



## LAST WORDS

I'd like to apologise for how long it took for this issue to come out. Here's some excuses: work, waiting for people to do stuff who never did, and forgetfulness.

I'd also like to apologise if this issue appears rushed, a bit rubbish, or full of pointless filler, and for if I'm repeating myself a lot. I'd also like to apologise if I'm repeating myself a lot.

But, if you think it's a little lame, you can help by submitting content - anything - for the next issue. Think you can do better? Then do! Your submissions are much appreciated and they are few and far between these days.

#### GOT FEEDBACK?

If you have a problem or concern about anything on the site, ezine, or anything else to do with us, please let us know as soon as possible! You can use the feedback forum or a form in said forum that will send your feedback straight to a moderator without other users being able to see. If your qualm is with a moderator, you can even just drop someone higher up a PM, and we'll dish out the appropriate spankings.

## AFFILIATION!

We're always on the look out for good quality websites to link share with. Affiliates bars might be a bit dated, but they're a great way to share traffic, and it doesn't have to end there: we're happy to help arrange cross-site competitions and other such shenanigans.

We can't take everybody, but it doesn't hurt to ask. If you think you have something to offer - and we have something to offer you - drop us a line!

#### CHAT WITH US

IRC's a bit dead lately! We need you!

Join in the conversation, talking about games, game making, and generally anything. Feel free to join in. There are two channels:

#hbr on the SynIRC network is a joint channel for HBGames and RPG Revolution, irc.synirc.com #hbr

#0rgy on the Slacked network is a... less mature channel, for HBGames alone. irc.slacked.org #0rgy