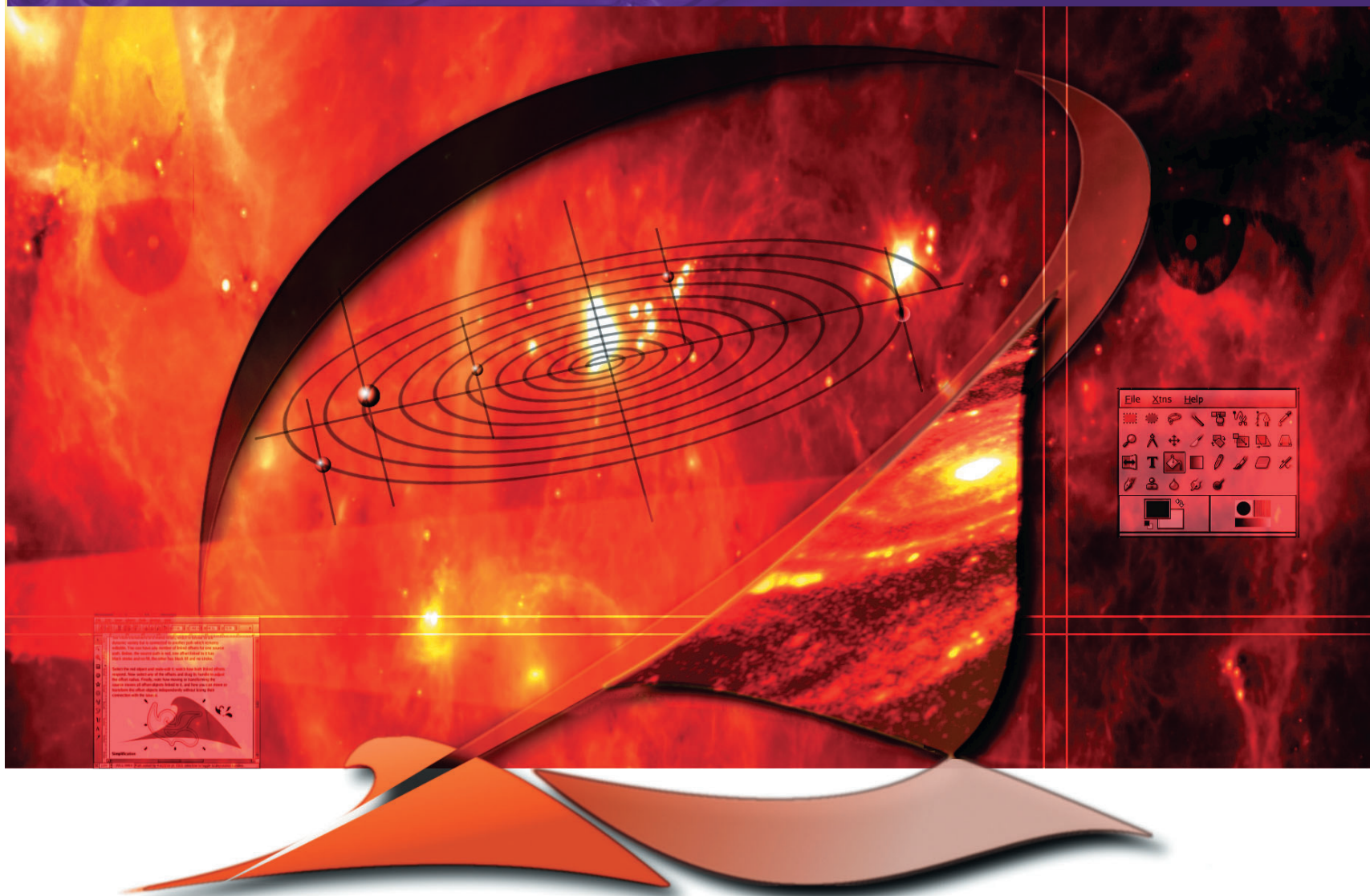


## TUTORIAL GIMP



## GREETINGS CARD DESIGN

# The art of colourizing clip art

The festive season is fast approaching, and you're afraid that you'll get stuck with the job of designing family greetings card – what to do? Sit back, relax, and enjoy yourself, says **Michael J Hammel**, because *The GIMP* can take you from clip art to seasonal storytelling in just a few minutes.

**T**hose of us who are known for our computing predilection are often assumed by those close to us to be able to turn our electronic box of tricks to any creative subject. That's fine and fair enough if you're an enthusiastic artsy type, but abilities to program in raw C++ and flair for visual design are not always abilities that go hand-in-hand. We're not all artists, but we often have reason to try to be, especially when hostage to the behest of our nearest and dearest.

The solution may be closer to your fingertips that you might immediately think. Our saviour comes from *The GIMP's* ability to easily create, save and recall selections. The selections act as fill areas that you shape with layer masks. Combining the layers in the right order leads to a final image that designers will admire, families will adore, and you will love – because it took you less time than browsing in the local card shop! Not to mention the crowds you avoided. And best of all – it comes from your heart!

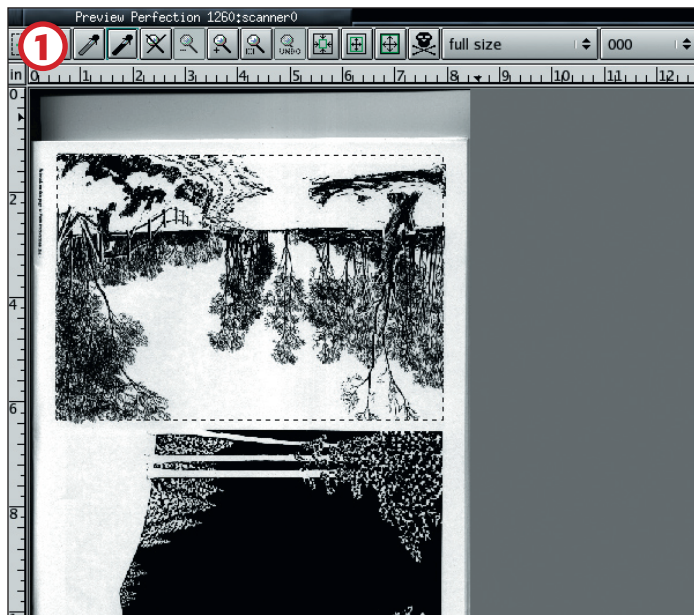
This month, we'll walk you through creating a image suitable for printing on blank greeting cards. The goal here isn't to duplicate the design, but to see how you can apply the exact same process to any stock clip art to create your cards.

We'll be working with *GIMP 2.0* and *SANE* for this project. *SANE* for *GIMP 2.0* may not be available for your distribution, so you can either use *SANE* as a standalone application (and not a GIMP plugin) as we do here; or you can use *GIMP1.2* and the *SANE* plugin. See [www.sane-project.org/](http://www.sane-project.org/) for more on scanners.

## Clip art input

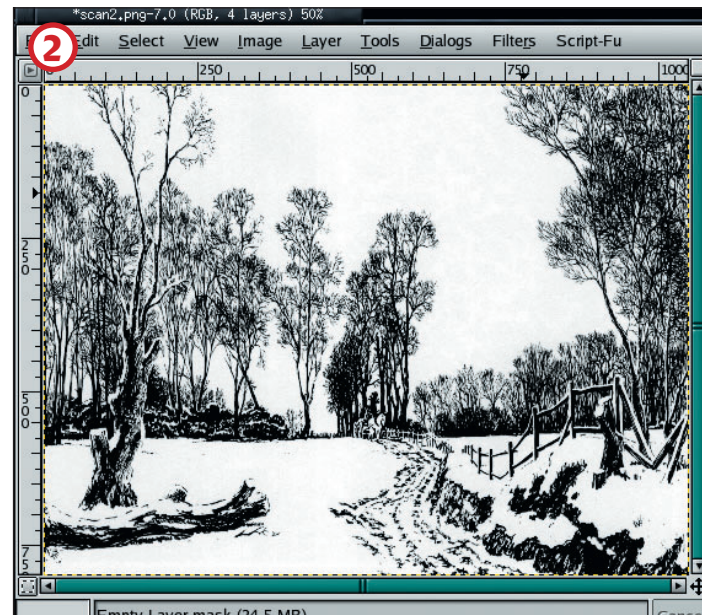
If you're not an artist, don't fret. We're starting with clip art scanned from one of the myriad clip art collections available for purchase. The most famous of these is probably the Dover Clip art series of books, from <http://store.doverpublications.com/>, each of which provides pages of clip art which you can scan and use royalty-free.





### Scanning

**1/** Start with a preview of the artwork. This image is upside-down, but that's easily fixed in *The GIMP*. The alignment is off so we use the selection tools in *SANE* to grab as much of the original image as possible. Set the scan mode to gray. Colour isn't necessary in the scan for this project. Set the Scan Resolution to 200 DPI (which is what we'll use for our print resolution later on). Save the scan to a file. It will save time if you decide to start over – scans take longer than opening a file. If you scanned directly into *SANE* as we did, then you'll need to open the file in *The GIMP*, otherwise the *SANE* plugin will have opened a *GIMP* window automatically.



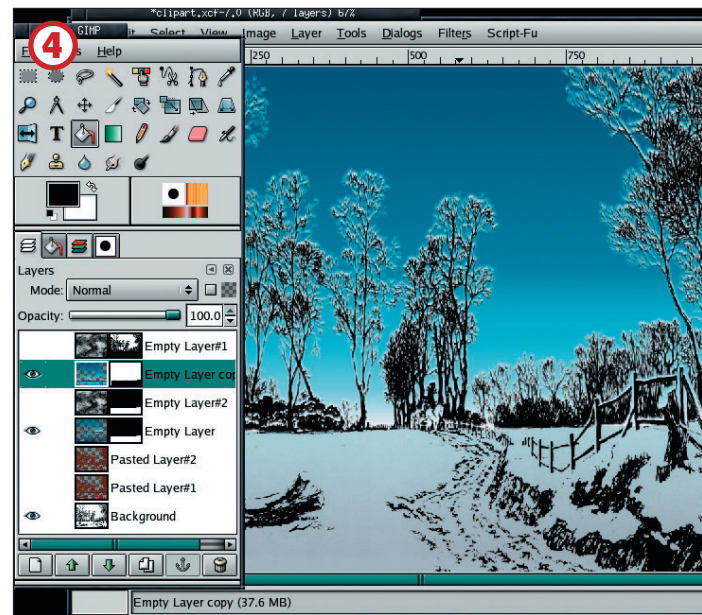
### Color Adjust

**2/** The image will be grayscale and, in this case upside down. The orientation is quickly fixed with the Flip tool. Adjust the white/black levels. You can use the Curves dialog to make the image more crisp without taking away too much details as well. The amount of adjustment is up to you, but the key at this step is to make the background as white as possible. Use the Color Picker to check that most of the background is the same color. When you're ready, convert the image to RGB using the Image>Mode menu. If you're planning on printing to card stock, this would be the time to scale the image appropriately. Remember – multiply the size of the card by the DPI to find out how big to make the image!



### Selection

**3/** The next part is quick but of crucial importance. Using the Select by Color tool, select the background. In this image the white is easily pulled from the background. Save this selection as a channel. We'll be using it again repeatedly. Click on the background layer again to make it active and get rid of the selection. We're now ready to colorize the image. Start by creating a new layer. Make it the active layer.



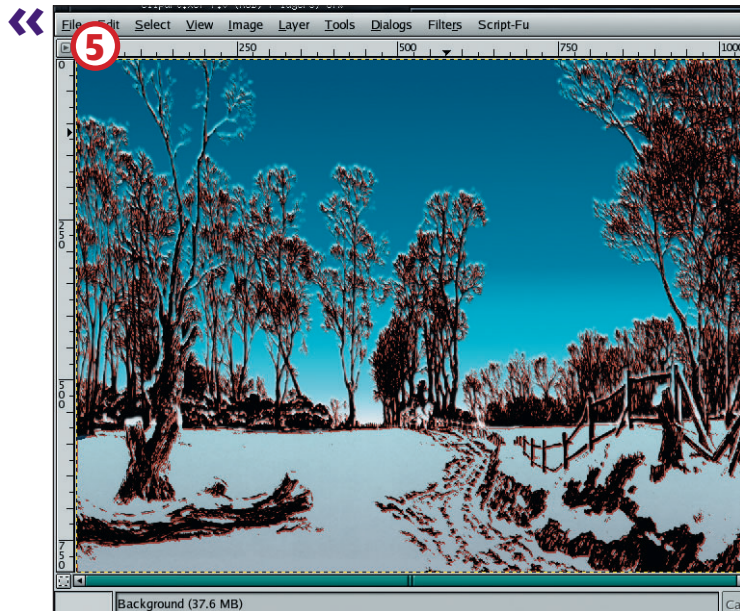
### Colourize Sky

**4/** Click on the saved channel and choose 'Channel to Selection'. Fill the selection top to bottom with the Gradient tool, using the Horizon 2 gradient using a linear shape. Try to match the horizon in the image to the horizon in the gradient. Use the Scale tool and stretch the image down or up until the horizons match. This small amount of scaling also added a slight appearance of snow on the trees in this image. Add a layer mask to mask out the area in the foreground – the snowy ground in this image. A light blur on this layer can also help soften the effects of the snow on the trees. We duplicated the layer, stretched it, setting its opacity to 40%, and applied a mask to the sky to add some color to the snow.

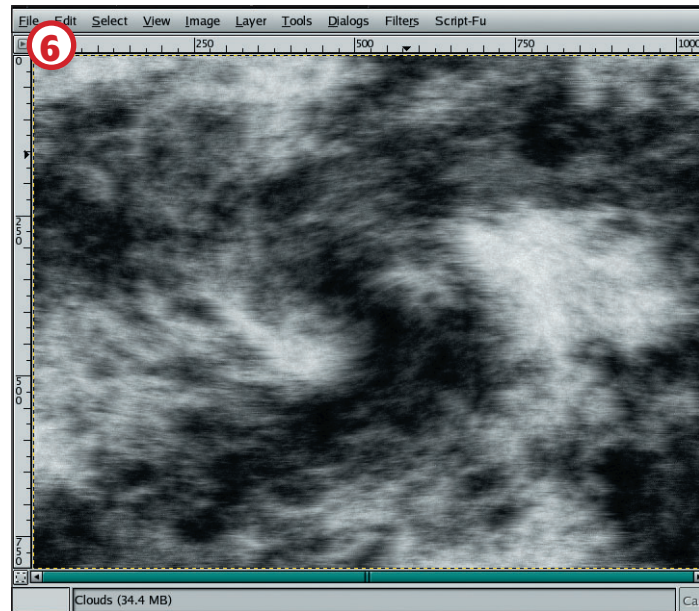




## TUTORIAL GIMP

**Colourize Trees**

**5/** Select the saved channel again and choose the Channel to Selection option. Choose 'Invert' from the Selections menu. Click on the background layer to make it active again. Use **Ctrl-C** to copy the trees followed by **Ctrl-V** to paste the trees into a floating layer. Click on 'New Layer' from the Layers menu. The Keep Transparency button for the new layer should be checked, so its safe to select the entire layer (**Ctrl-A**) and fill it with colour. Play with opacity and Mode settings for this layer, as well as its position in the layer stack, to find the desired effect. We placed this layer just above the background, set its opacity to 42%, set the layer mode to Hard Light (which is new to *The GIMP 2.0*) and then duplicated it to enhance the effect.

**Clouds**

**6/** Generating some background clouds is very easy. Create a new layer. Choose **Filters>Render>Clouds>Plasma**. Set the turbulence to 5 and use a random seed. The pattern generated will be in full color. Choose **Layers>Colors>Desaturate** (in *The GIMP 1.2* this would be under **Image>Colors>Desaturate**). Adjust the layer using the Curves dialog to allow for more black regions. The result will look more like smoke than clouds. Choose **Filters>Distorts>Wind**. Set the Style to 'Wind', the Direction to 'Right' and the Edge Affected to 'Both'. The amount of threshold and Strength will be your choice – play with these settings. When you're done, apply Whirl and Pinch to the layer to make the clouds more wispy. Add a layer mask. Use the saved channel selection, invert it and fill the selection in the mask with black. Then mask out the foreground area as well.

**Texturized snow**

**7/** Duplicate the cloud layer and remove the mask for the new layer. Add a new mask, fully white. Earlier, we created a mask for the foreground in the sky layer. Click on that mask and use the Fuzzy selection to create a selection of the sky (the black region). Now click on the new mask and fill with black. Scale or distort this new layer to generate the snow's rolling texture. Blur the layer if necessary and adjust the opacity.

In the final image, we can adjust the sky colour to be more of an early evening shade, with dark skies above and lighter toward the horizon. We also adjust the cloud layer to use Grain Merge to bring out the clouds using the colours of the sky. The final effect is a little grainy through the trees. This is because of the initial black/white adjustments and the selection we made from the background that we saved to a channel. The initial black/white adjustments could be modified and/or the selection feathered to remove some of the grain.

Printing this image is a bit of a task. You will need to know the exact dimensions of your print area as well as any margins that your printer will not print to. Fortunately, most modern inkjet printers will print all the way to the edge of a card, making the calculations less complex. In any case, the use of the *GIMP-Print* plugin (available for both *GIMP 1.2* and *2.0*) and the *CUPS* printing system (available for all major Linux distributions) will produce high quality prints. [LXF](http://www.linuxformat.co.uk)



## FREE CLIP-ART

Online resources

Clip-art doesn't have to be scanned in – there's lots available online too. Now that *The GIMP 2.0* can incorporate *Inkscape's* vector graphics facility natively as a plugin, it opens up whole new areas of scalable art resources that can be manipulated by Linux users with *The GIMP*. If you are in the position to favour the following projects, please do so, as they are all Linux-friendly organisations to a greater or lesser extent.

### GIMP-savvy

<http://gimp-savvy.com/PHOTO-ARCHIVE/> has more than 2.5GB of free photos and images, consisting of something like 27,000 images. You may spend a while browsing to find what you want – full indexing of the images is planned; at present images are provided in an interactive environment allowing the community to participate in the labelling of archived photos. The eventual expectation is that the resulting index will be both richer and more robust than one fashioned by any so-called master architect. Why not lend a hand?

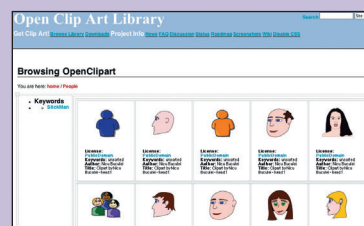
The images and photos in this archive come from three main sources: the National Aeronautics and Space Administration (NASA), the National Oceanic and Atmospheric

Administration (NOAA), and the US Fish and Wildlife Service (FWS). Each of these sites clearly state that their photos and images are in the public domain and give the conditions for their use; please read their statements. There's also a clear and succinct explanation of what constitutes 'fair use', at least from a US perspective; so read it if you've ever been bamboozled in the past by legalese.

### Open Clip Art Project

[www.openclipart.org/index.php](http://www.openclipart.org/index.php)

This project has the goal of creating a free archive of clip art that can be used with free software. Much of the artwork is in SVG, hence it can be both used and created in *Scribus*. The concept is to have a ready made set of clip art



The Open Clip Art Project is in its nascent stages, so don't expect too much from it right now!

objects that can speed document and artwork creation for a variety of uses. The project has been launched by a couple of members of Inkscape team, Jon Phillips and Bryce Harrington, among others. A well-written FAQ has been posted and *Scribus* users are encouraged to support the project.

### Free Foto

[www.freefoto.com/index.jsp](http://www.freefoto.com/index.jsp)

The UK's largest free photo resource.

### Wikipedia Images

[http://en.wikipedia.org/wiki/Public\\_domain\\_image\\_resources](http://en.wikipedia.org/wiki/Public_domain_image_resources)

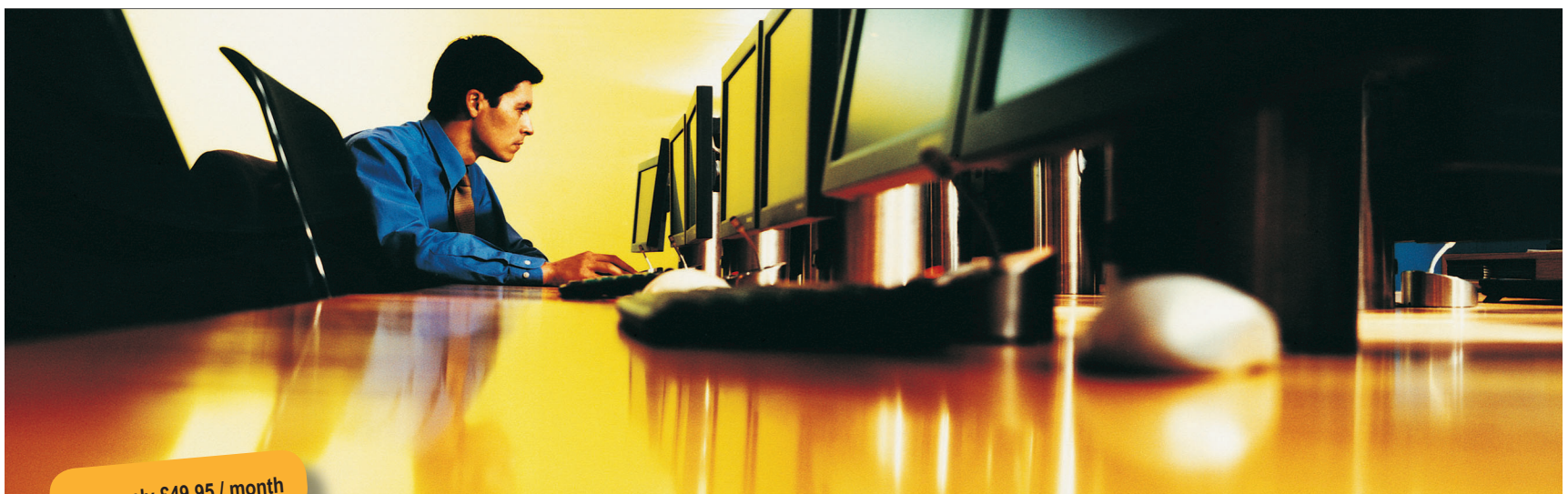
A great selection of links to Free photo and clip-art resources of all kinds.



Most clip-art sites have terms that cover commercial use as well as free non-profit use – please read them!

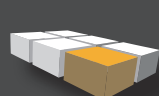
## NEXT MONTH

Is there any aspect of Linux-based art that you'd like to see covered in a future issue of *Linux Format*? Whether you'd like a more advanced recap of the subjects that we've already covered, or there's something that you'd like clarified, or think that there's something we've missed, then please email us at [linuxformat@futurenet.co.uk](mailto:linuxformat@futurenet.co.uk) with 'GIMP tutorial suggestion' as the subject-line. The whole *LXF GIMP* tutorial series will be available soon on the coverdiscs and online, so watch this space!



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