» Gimp Open source image-editing software you can get your teeth into
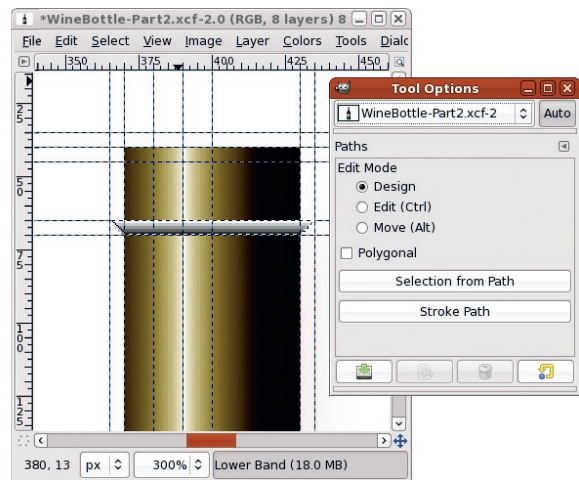
Gimp: A Bottle

With a blur, a colourise and some guides, **Michael J Hammel** uses digital aging to add style and credits the the wine bottle project.


› **The Lower Band layer is used for both the angled bottom and wide lower band components of the cap.**

Our expert

Michael J Hammel is a contributor to the *Gimp* project and the author of three books on the subject, including his latest, *The Artist's Guide to Gimp Effects*.

This second part of the realistic wine bottle tutorial will add the final details that make the wine bottle really come to life. This includes adding a bottle cap along with integrating some text, adding clip art and merging some creative photography with the labels. Before we dive into
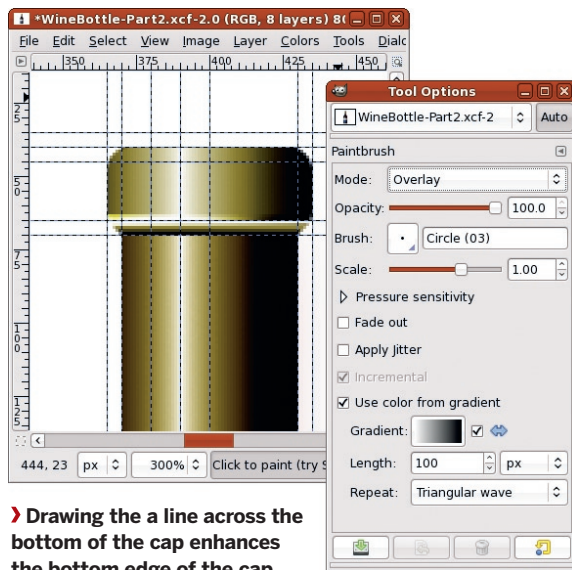
› **Drawing the a line across the bottom of the cap enhances the bottom edge of the cap.**

these though, let's review what we learned last month in the first part of the tutorial.

The most important lesson from last month's tutorial focused on using *Gimp*'s guides and grid for precise measures and alignment. The outline of the bottle used guides to place anchors for curved paths. Highlights created with the Gradient tool in multiple layers were aligned by simply bounding mouse drags with guides. and guide intersections made it easy to position project layers. The guides were positioned to overlap *Gimp*'s grid so that the Snap To Grid option would make it easier to drop anchors and create selections by referencing the guide intersection points.

Symmetry is your friend

Another trick from the first part of this tutorial was to draw half a bottle, then duplicate and flip it to complete the whole. Also, colour in each project layer was kept consistent by using greyscale gradients and tinting these with exact values in the Colourise dialog. And finally, we set the Levels dialog using specific input values, rather than referencing inexact settings for the input sliders.

Only a few tools were used to create the 3D bottle in the first part of this tutorial. This next part uses a few more *Gimp* features, but these steps won't all be so precisely set with guides. Text layers and clip art will be aligned manually, using nothing more than your own eyes for positioning. Fortunately, the most complex component of the bottle – the bottle cap – can be created using the same guide-based methods from part one of the tutorial.

» **Last month** We drew the shape of the bottle, then gave it depth and a label.

# of wine
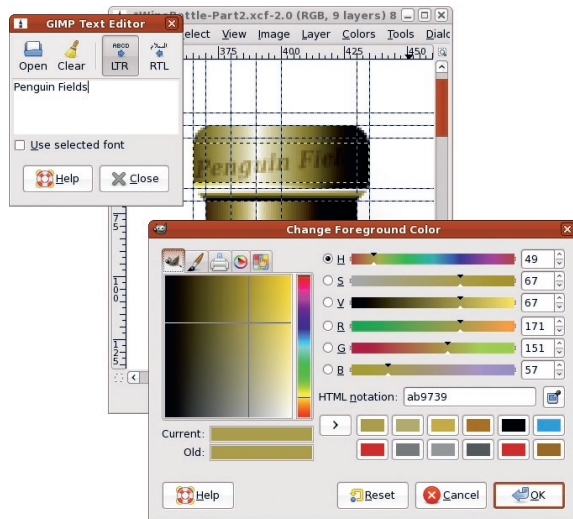
❯ **Many of the details in the cap will only be appreciated when viewed with the final image as a whole.**

This month the wine bottle will get a bottle cap, some floral glass etching, and label lettering and imagery. The techniques you take from this tutorial should help you become more adept at repeating processes that you can use in any project.

Before we start, be sure to reset the foreground and background colours to black/white respectively. All text used in this part of the tutorial will be based on common fonts found in all current Linux distributions. Also, immediately after opening last month's project file, save the project as a new name, so if you mess up you can always go back to the last tutorial's image and try again.

Wine bottle cap

The bottle cap is made up of four distinct parts:
❯ An angled bottom.
❯ A wide lower band.
❯ Text in the lower band.
❯ A ridged upper band.
The cap will require a new set of guides (you should still have the guides from part one in your project). Add three vertical guides (Image > Guides > New Guide) at 365, 380, and 435. Add four horizontal guides at 35, 45, 65 and 70. Zoom in (Shift +) so that the top of the bottle and all of the gold wrapper are visible.

Add a layer to the project and call it Lower Band. Choose the Path tool from *Gimp*'s Toolbox. Click on the guide intersections at 370/70, 365/65, 435/65, and 430/70. In the Tool Options dialog, click on the Selection from Path button, then choose the Gradient tool from the Toolbox. Click on the Reset button at the bottom of the Tool Options dialog. Drag

the image window in from the guide intersections at 380/70 to 380/65.

Choose the Rectangle Select tool from the Toolbox. Working in the same layer, drag a selection from the intersection of guides at 365/40 to 435/70. This will temporarily overlap the gradient from the last step. Hit Enter to accept this selection. Round the corners of the selection (Select > Rounded Rectangle) by 50%. In the Tool Options dialog, set the Mode to Subtract. Drag a selection from the guides intersecting at 365/65 to 435/70. Hit Enter to use this selection to cut off the bottom of the first selection.

Choose the Gradient tool from the Toolbox. In the Tool Options dialog set the Shape to Bi-linear and click on the Reverse button. Drag from the guides interesting at 390/45 to 435/45. Clear all selections (Ctrl+Shift+A or Select > None). Open the Colourise dialog (Colours > Colourise) and set the Hue to 50, the Saturation to 86 and the Lightness to 0.

In the layers dialog, set the Lock Alpha Channel button. This will ensure that transparent pixels stay transparent as we complete this part of the tutorial. Choose the Paintbrush from the Toolbox. Click on the Reset button in the Tool Options dialog. Set the Mode to Overlay and choose the Circle (03) brush, then set the Use Colour from Gradient button and choose the FG to BG (RGB) gradient. Click on the Reverse button, set the Length to 50 pixels, and in the image window draw from Guide intersection at 365/65 to 435/65
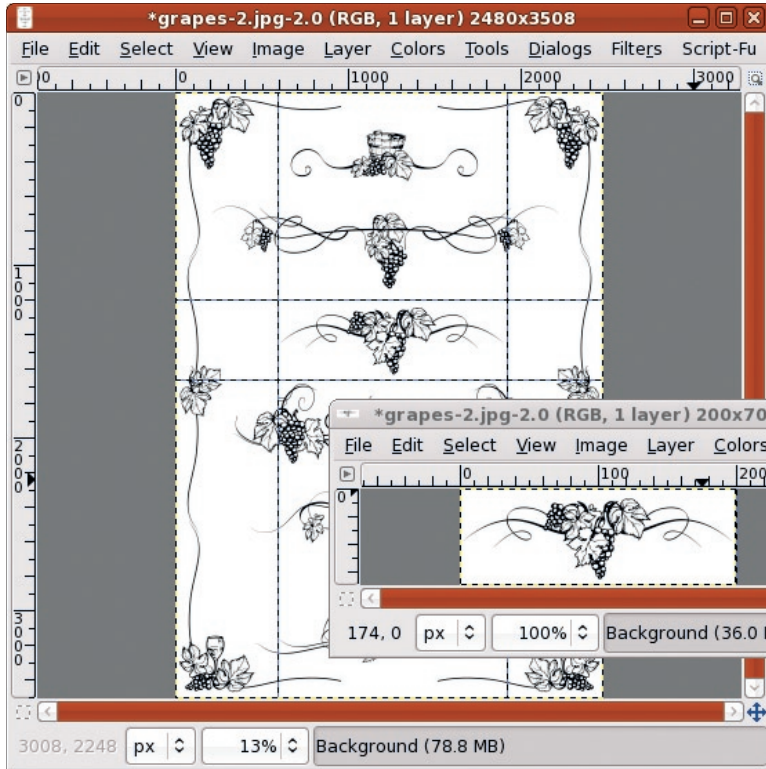
The wide lower band of the cap now gets a strip of writing. Choose the Text Tool from the Toolbox. Set the Font to Serif Bold Italic, the size to eight pixels and the colour to Black. »

❯ **The band was blurred to soften the ridges, giving them a rounded appearance.**
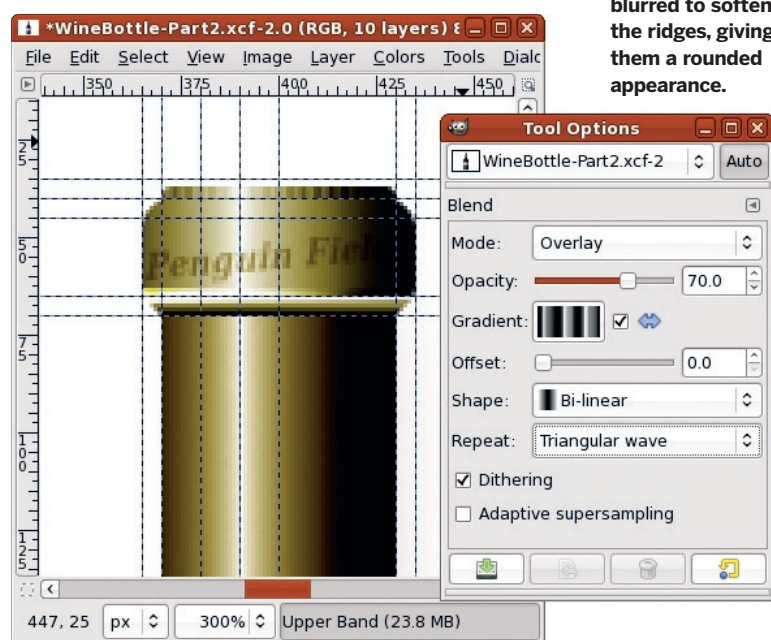
> **The grapes used for the etching are in vector format. Look on iStockPhoto.com and search for 6665569, the file number of the Grape Ornaments image.**

Click in the image window to open the text editor window and type the name of our vineyard – "Penguin Fields".

We'll have to position the text by hand, so turn off the Snap To Guides option (View > Snap to Guides). Use the Move tool to drag the layer into the centre of the Lower Band. Once positioned, turned the Snap To Guides back on.

Choose the Shear Tool from the Toolbox. Click in the image window to open the Shear dialog. Set the Shear Magnitude Y to -7 and click on the Shear button to apply the effect. Turn on the Layer Lock Alpha Channel. Set the Foreground colour to Red 171, Green 151 and Blue 57. Drag this colour from the FG box in the Toolbox to the image window to colour the text. Set the layer mode for the text layer to Multiply and the Opacity to 70%.

The next thing we're going to do is add a ridged upper band to the top of the cap. Add a layer to the image (Layer > New) and call it Upper Band. Choose the Rectangle Select tool from the Toolbox. Click on the Reset button in the Tool Options dialog. Choose the Rounded Corners option. Drag the selection from the guides intersecting at 370/35 to 430/40. Use the Tool Options dialog to position the selection at 370/37. Hit Enter to accept the selection.

Reset the foreground and background colours in the Toolbox. Choose the Gradient tool from the Toolbox. Hit Reset in the Tool Options, the set the Shape to bi-linear and click on the Reverse button. Drag in the image window from the guides intersecting at 390/45 to 430/45. Reset the Tool Options again. Set the Mode to Overlay and Opacity to 70%. Choose the Blinds gradient and click on the Reverse button.

Set the Shape to Bi-linear and the Repeat to Triangular Wave. If the Dithering option is not set, click on it. Drag from the guides intersection at 400/45 to 390/45.

Open the Colourise dialog and set the Hue to 50, the Saturation to 86 and the Lightness to 0, then apply this to the selection. Once again, enable the Lock Alpha Channel for this layer in the Layers dialog. Open the Motion Blur (Filters > Blur > Motion Blur) filter. Set the length to 2 and Angle to 6 and apply the blur. In the Layers dialog, move the Upper Band layer below the Lower Band layer. Remove the selection (Select > None).

Floral/fruit etching

The next step involves the use of clip art. I'm using a vector image from iStockPhoto converted to JPEG, cropped and scaled to 200 wide by 70 pixels high. Add a horizontal guide at 300 and a vertical guide at 300 for this step. Copy the clip art image into the wine bottle image and name the clip art layer "Grapes". Move this layer just above the White Label layer in the Layers dialog. Use the Move tool to drag the Grapes layer in the image window so the top of the layer aligns with the guides intersecting at 300/300. This will place half of the grapes layer over the White Label and half over the glass bottle.

Set the Mode for the layer to Multiply then duplicate this layer (Layer > Duplicate Layer). The duplicate layer name will be "Grapes Copy". Set the layer Mode for Grapes Copy to Dodge. Invert the colours of the duplicate layer (Colours > Invert). Click on the original Grapes layer in the Layers dialog to make it the active layer and add a black layer mask (Layer > Mask > Add Layer Mask). Add a white layer mask to the Grapes Copy layer.

Click on the White Label layer in the Layers dialog and then create a selection from its alpha channel (Layer >
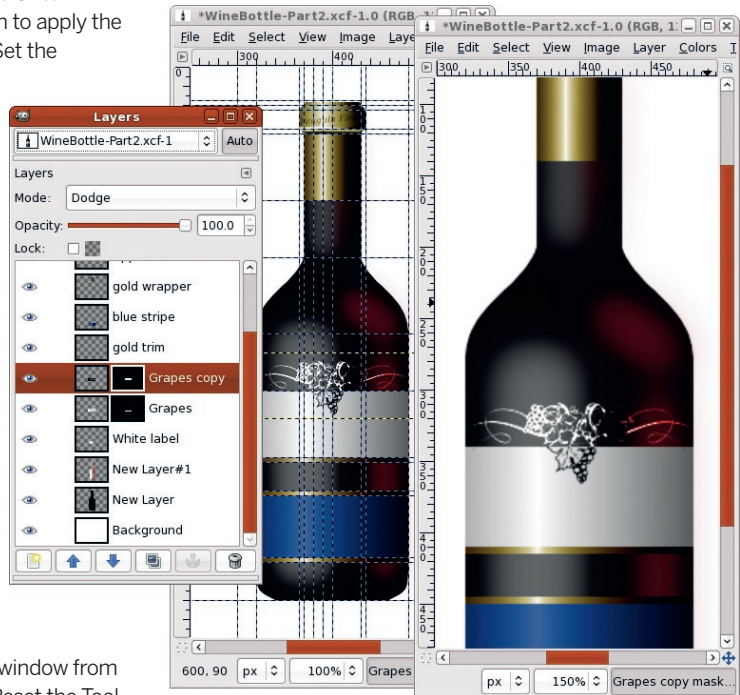
> **As with _Photoshop_ and _Illustrator_, the key to doing anything advanced in _Gimp_ is the Layers dialog.**

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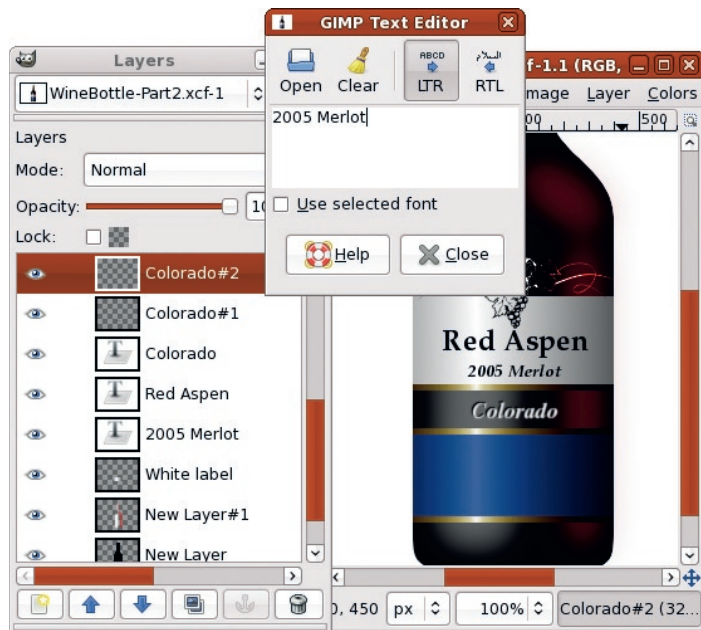
> An extra step could be added here to apply colour to the Colorado layer to match the gold trim, but the detail doesn't show up well in print.

Choose the Text tool again and click on the image anywhere outside of the "2005 Merlot" layer boundary. The text editor dialog will open again. Type in "Red Aspen" and close the dialog. In the Tool Options set the Font to URW Palladio L Bold and the size to 23 pixels. Use the Move tool to manually align the text in the centre of the White Label.

The country of origin is next, though I'll use my US state instead. Choose the Text tool and click in the image again. In the Text Editor type "Colorado" and close the dialog. In the Tool Options set the Font to "Nimbus Roman No9 L Bold Italic", the size to 18 pixels and the colour to black. Use the Move tool to centre this layer in the image window between the two gold stripes that separate the White Label from the Blue Stripe. Set the layer boundary to match the image size (Layer > Layer to Image Size).

The next step is to Duplicate this layer and invert the colours so that the text is white. Offset this layer (Layer > Transform > Offset) by one pixel in both the X and Y directions. Apply a Gaussian Blur (Filters > Blur > Gaussian Blur) of one pixel to both layers.

Transparency > Alpha to Selection). Click on the Grapes Copy layer mask in the Layers dialog. Fill the selection with black. Click on the Grapes layer mask and fill with white.

Use the Rectangle Select tool to make a selection starting at the guides intersecting at 320/300 to 480/370. Invert this selection. Fill the selection with black (this masks off the white edges of the grapes layer that overhang the bottle). Click on the Grapes Copy layer mask and fill the selection with black again. Clear the selection (Select > None).

Lettering

Text is now added to the White Label layer. To make this easier, only fonts available on most modern Linux distributions have been used. To position the text, disabled the Snap to Grid and Snap to Guides options in the View menu.

Click on the White Label layer in the layers dialog. Choose the Text tool from the toolbox and then click in the image to open the Text Editor. Type in "2005 Merlot" (or whatever year and variety your palate prefers) and close the editor dialog. In the Tool Options dialog set the Font to "URW Palladio L Bold Italic" and the size to 14 pixels. Use the Move tool to manually drag the text layer in the image window to the bottom-centre of the White Label.

Blue stripe graphic

The last piece of this project is to integrate a graphic into the Blue Strip layer. I've used a photo of the mall area of Queenstown, New Zealand here, but anything with trees in will do just as well for your own design. The image is desaturated first (Colours > Desaturate) and contrast adjusted (Colours > Brightness-Contrast). It is then scaled to fit the size of the blue stripe exactly: 160 pixels wide by 65 pixels tall. The image is copied into the wine bottle project and manually positioned over the Blue Stripe. Finally, the layer mode for the graphic is set to Soft Light. **LXF**
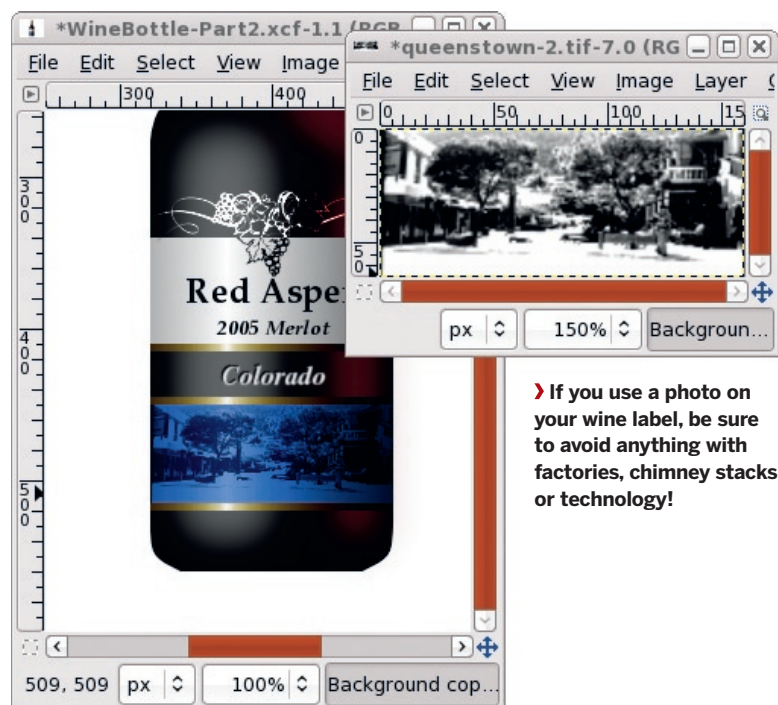
> If you use a photo on your wine label, be sure to avoid anything with factories, chimney stacks or technology!

Drawing tips

1 Too many guides clutter the view. Use Image > New View to get a clear view of your work without guides by turning off the guides.
2 The highlights come from blurs, and those may overlap the edges of the bottle. Add a mask to those layers and use the bottle layer to get a selection, then

invert it and fill the mask with black.
3 Save selections if you need to create multiple masks with that shape.
4 Image too small for print? Scale it up before adding text. Scaling the shape and colours will work fine but scaling the text will leave you with blurred text.

» **Next month** We'll integrate Gimp with multiple desktop applications.