RAW
MADE EASY

Get the ultimate image quality with our great
guide to editing photos in Adobe Camera Raw

YOU CAN MASTER
RAW

Learn how to process your Raw files to perfection

Most of us probably began shooting images in Jpeg form, and while some have made the switch to Raw, others are more reluctant. While it's true that Jpegs have their advantages, in some ways Raw is the less complicated format.

A Raw file is a complete record of all the information captured by your camera. In contrast, Jpegs are processed in camera, with any unused information discarded. This means that Raw files are much more forgiving of mistakes as the extra information makes it easier to correct exposure, tease out details and tweak colours.

Perhaps the main reason some don't make the switch to Raw is the relatively limited options in post-processing. You can open a Jpeg in almost any image editor, whereas Raw files require converting before you can open them into Photoshop.

The best place to convert them is in Adobe Camera Raw. But it's far more than just a file converter. ACR has a range of powerful tools and commands, whether you want to adjust tones, remove noise, correct distortion, convert to mono or perform many other useful edits.

Over the next 14 pages we'll show you how to get the most out of ACR's superb tools. And we're not just talking simple tweaks either.

You can use ACR to create a range of stunning effects from HDR to hand-colouring.

Discover these top techniques and more...

PAGE 8

Detail Panel sliders
Learn how to use the sliders in the Detail Panel of ACR to add sharpening to your Raw files and also fix noise in your shots

PAGE 10

Selective control
We'll show you how to make selective adjustments to your Raw files with three essential tools in ACR

PAGE 16

Five great ACR effects
From hand-colouring to solarisation, you can treat your Raw files to a surprising number of different effects in ACR

CAMERA RAW INTERFACE

Get familiar with the interface and tools you need to improve your Raw photos

ACR has a simple layout; all the main controls and settings are on the right-hand side of the display, with a toolbar along the top. You can use these tools and settings to take advantage of a Raw file's greater range of tones and detail. Every move you make in ACR is reversible, so you're free to try out any combination of settings you like. You can close the image, then come back to it later and all the settings remain editable. And while Photoshop offers similar tools, doing the job in ACR will ensure the maximum possible quality.

01 SELECT ALL
If you have multiple files open, click the Select All button to make universal changes to the whole set. This is great for processing multiple images. For example, to correct a recurring sensor mark, open the set of images, click Select All, then simply remove the mark in one image with the Spot Removal tool.

VERSIONS OF ACR

ACR is regularly updated with new data and tweaks to the settings, so make sure you keep Photoshop up to date (Help>Updates). Your version of Camera Raw will depend on your copy of Photoshop. For example, if you have CS5 you will have version 6.7, whereas CS6 owners can use version 7.1. Some of the slider names have been changed, but the majority of the features remain the same in all versions. Elements users can also edit their Raw files in the ACR plug-in, but the Elements version is more basic, with access to three panels: Basic, Detail and Camera Calibration. A few tools are also missing, including the Adjustment Brush. It's still a powerful plug-in (the Basic panel alone makes it an essential step in your workflow) but you'll have to enter the main interface for more advanced adjustments.

Adobe Photoshop Elements 10
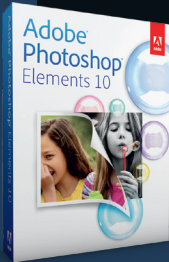
02 SYNCHRONISE
If you've made a series of adjustments that you really like, and you want to apply them to the rest of your image set, click the Synchronise button to apply them to the other images. You can choose exactly which settings to include or omit from the synchronisation.

03 ZOOM AND HAND TOOLS
You can use these tools to zoom in and out, and pan around your image, or alternatively, you can use the trusty keyboard shortcuts **Cmd/Ctrl** and **+** or **-** to zoom in or out, and the Space Bar to pan. Double-click the Zoom tool to zoom to 100%, and double-click the Hand tool to pull back to full screen.

04 THE TARGETED ADJUSTMENT TOOL
This powerful tool enables you to target and adjust particular tones and colours in your image simply by dragging left or right over them. Click and hold over the tool to choose from Parametric Curve, Hue, Saturation, Luminosity or Grayscale Mix.

05 CROP TOOL
Click and hold the Crop tool to choose from a handy list of crop ratios such as 1 to 1 and 2 to 3. Nothing is irreversible in ACR, so if you change your mind about a crop, click back on the tool to re-adjust it.

06 SPOT REMOVAL TOOL
Fix small marks and blemishes with the Spot Removal tool. It's useful for removing a recurring sensor mark from a batch of images, but for most ordinary tasks the Healing Brush and Clone Stamp tools in Photoshop offer more flexibility.

07 ADJUSTMENT BRUSH AND GRADUATED FILTER
Two of the most powerful tools in ACR, the Adjustment Brush and Graduated Filter enable you to make selective adjustments to colours, tones and detail across your image. The Graduated Filter is especially useful for improving dull, flat skies.

08 SAVE IMAGES
This is really more like a 'Save As' command. Click the button to access your saving options. It's great if you need to batch rename files, save a set of Raw files as jpegs, or convert a manufacturer's Raw file (such as Nikon's NEF) to the universal DNG format.

09 WORKFLOW OPTIONS
Click here to access output options such as Bit Depth. Choosing 16 Bits/Channel will ensure the image has the maximum number of colours when you open it in Photoshop (so many, in fact, that your monitor

and printer are incapable of displaying them all). But it will also limit your image-editing options. Selecting 8 Bits/Channel will give you fewer colours, but more options. You can also alter the bit depth in the main editor interface.

10 HISTOGRAM
The histogram displays the image's tonal range from shadows on the left, to highlights on the right. The height of the graph at any point indicates the number of pixels with a certain brightness value. For most images, a healthy histogram should taper off at both ends. If it intersects the side of the box, it

means areas of the image are lacking detail, having been clipped to pure black or white. If this is the case, you may be able to recover detail using the sliders in the Basic Panel.

11 CLIPPING WARNINGS
You can toggle flashing clipping warnings on or off by pressing **U** for shadows (think under-exposed) and **O** for highlights (think over-exposed). Alternatively, hold down **Alt** while dragging the Exposure, Shadows, Highlights, Whites or Blacks sliders in the Basic Panel to see the clipped pixels overlaid on the image as you adjust the settings.

12 SLIDERS
Most panels display a set of sliders. You can double-click a slider to reset it, so you can get a handy before and after by holding your mouse still over a point on the slider then alternating between a single and double-click.

13 OPEN IMAGE
Click this button to open the file into Photoshop, or hold down **Shift** and click to open the image as a Smart Object, which enables you to go back and edit the file in ACR by clicking the Smart Object's thumbnail in Photoshop's Layers Panel.

CAMERA RAW PANELS

Discover the wealth of features in Adobe Camera Raw's 10 panels

Adobe Camera Raw is the first port of call for Raw files, but it's far more than just a quick stop off for converting your images. There's surprising depth to the features on offer. You can't make composite images, graphic designs or text, but you can make exactly the kind of edits photographers need to make, such as tonal adjustments, lens correction and sharpening. Many of these controls are accessed via the panels on the right of the interface. There are 10 different panels to play with, housing hundreds of options for changing colour, exposure, detail and more. And, of course, it's far better to make these changes in ACR rather than in Photoshop, because you'll retain the maximum amount of image data and quality available from the Raw file.

"You'll retain the maximum amount of image quality"
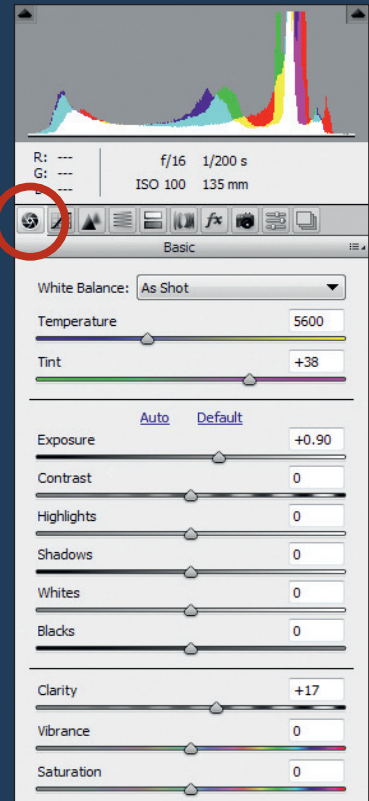
BASIC PANEL
The Basic tab opens by default when you first open a file in ACR, and with good reason. It's the ideal place to begin editing your image. Start at the top with White Balance, then work your way down the list of sliders. You can check for clipped pixels by holding down **Alt** while dragging the Exposure, Highlights, Shadows, Whites or Blacks sliders. The Clarity and Contrast sliders can give your image extra punch, but be careful not to go too far. Saturation will intensify the colours universally, while Vibrance will target and boost only the less-saturated colours.
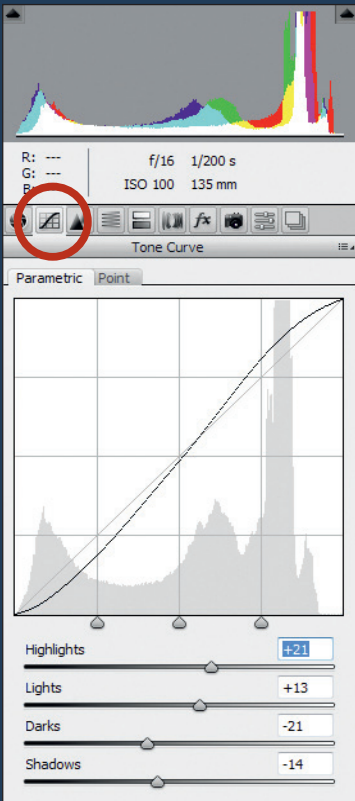
TONE CURVE
The Tone Curve allows you to improve tones and contrast by making certain parts of the tonal range lighter or darker. The darker tones are to the left of the box, and the lighter tones to the right. The Curve line can be moved up or down to lighten or darken certain points along the scale.
This is easier to understand when using the Parametric settings, which allow you to control the line with sliders for different tonal ranges: Highlights, Lights, Darks and Shadows. The Point tab enables you to add up to 14 anchor points along the line and drag them up or down.
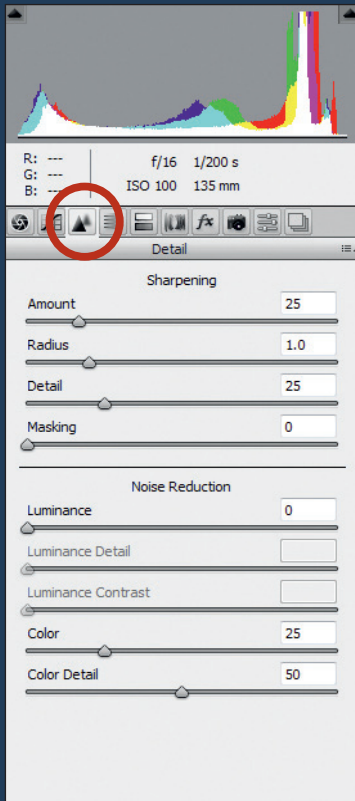
DETAIL
The Detail tab houses Sharpening and Noise Reduction sliders. Both work very well. It's best to reduce noise at the beginning of the editing process, as further adjustments later on may amplify the noise. You'll need to zoom in close to see the results – double-click the Zoom tool to view at 100%, and the Hand tool to go back to full screen. When sharpening, use the Amount and Radius sliders to control the strength, and the Detail and Masking sliders to control the areas in which the sharpening is applied. Hold down **Alt** while dragging to see the effect.
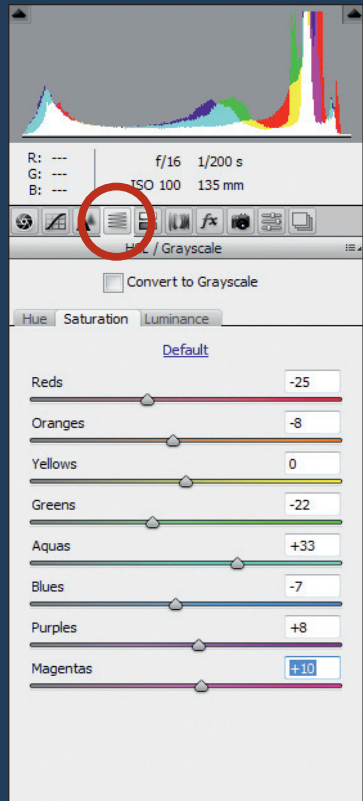
HSL/GRAYSCALE
HSL stands for Hue, Saturation and Luminosity, accessed through the three tabs at the top. With control over eight colour ranges, the HSL/Grayscale panel is the best place to make colour tweaks. You can use the sliders, or use the Targeted Adjustment tool from the Tools Panel and drag left or right over points within the image to zone in on particular colours.
The Convert to Grayscale check box at the top will render the image in black and white while giving you control over the brightness of the colour ranges. So it's a great place to apply a range of black and white effects.
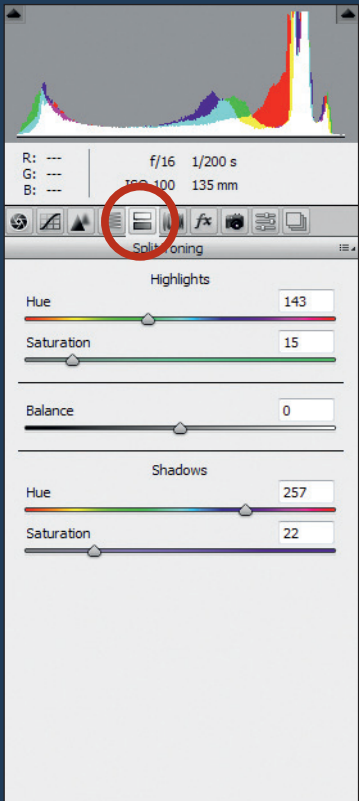
SPLIT TONING
The Split Toning Panel allows you to change the hue of the highlight or shadow tones independently of one another. So it's useful if you need to correct an image with a noticeable colour cast in the highlights or shadows. Used at higher Saturation levels, it can also dramatically alter colours for creative results or retro colour shifts. If you've converted the image to monochrome with the HSL/Grayscale panel, split-toning will help you introduce colour tints to the highlights and shadows, which enables a range of mono effects such as sepia or selenium toning.
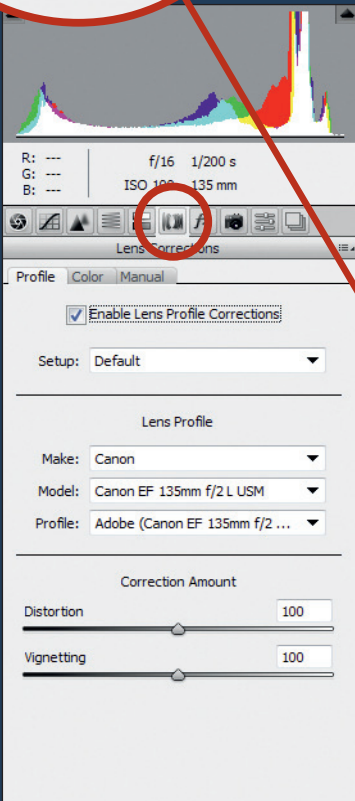
LENS CORRECTION
ACR has a large database of common lenses, so it can automatically detect and correct problems such as distortion and vignetting. The list of lenses is regularly expanded and updated, so the chances are high that the lens you used to shoot the photo will show up, but if not then you can correct lens problems manually. Chromatic Aberration usually occurs around areas of high contrast, such as on the outlines of trees or buildings against a bright sky, and can crop up even with quality lenses. It's easy to correct under the Color tab in the Lens Correction Panel.
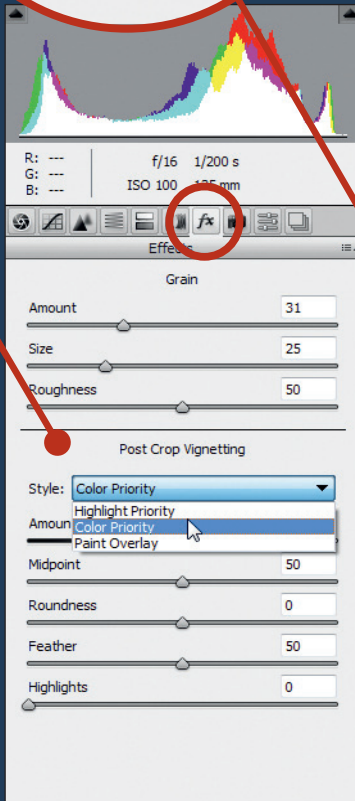
EFFECTS
ACR isn't the best place to apply lots of whizz-bang effects, hence the limited options available in the extravagantly named Effects Panel. Here you can choose to add grain or a vignette.
Sometimes a vignette can improve a composition by drawing the eye into the frame, so you may want to try darkening or lightening the corners with the Post Crop Vignetting sliders. It's also possible to create a range of border and spotlight effects by experimenting with the sliders. The Grain settings can be useful on mono images for getting an authentic film look.
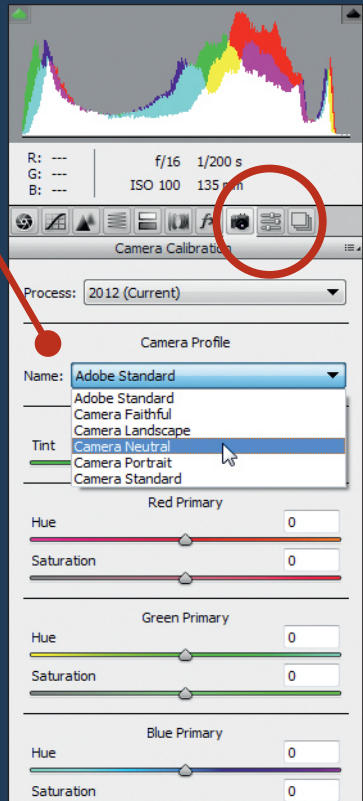
CAMERA CALIBRATION
This is one of the biggest reasons to shoot in Raw. By default, the Camera Profile is set to 'Adobe Standard', but often this doesn't give the best results. By selecting one of the other camera profiles from the menu, you'll get much more pleasing tones.

PRESETS & SNAPSHOTS
The Preset Panel allows you to save settings to be used on other images. You can also apply these Presets in Bridge by right-clicking a file and choosing Develop Settings. The Snapshot Panel lets you save certain points in your ACR workflow.

SHARPENING AND NOISE REDUCTION

Find out exactly what each slider in the Detail Panel does, and when to use them

Sharpening your Raw files

Sharpening is an essential step in the image-editing process, particularly when working with Raw files, which are usually softer than Jpegs – due to Jpegs being sharpened in-camera. There are two types of sharpening: Capture and Output. In ACR, we apply initial Capture sharpening to fix an inherent softness in most digital images. Output sharpening is usually done at the end, before making a print or presenting on-screen, so it's best carried out in Photoshop.

Sharpening works by increasing contrast around edges where lighter tones meet darker tones. At the edge, the light tones will be lightened, and the shadow tones will be darkened. To the eye, this makes the edge crisper. But push it too far and you begin to see edge halos.

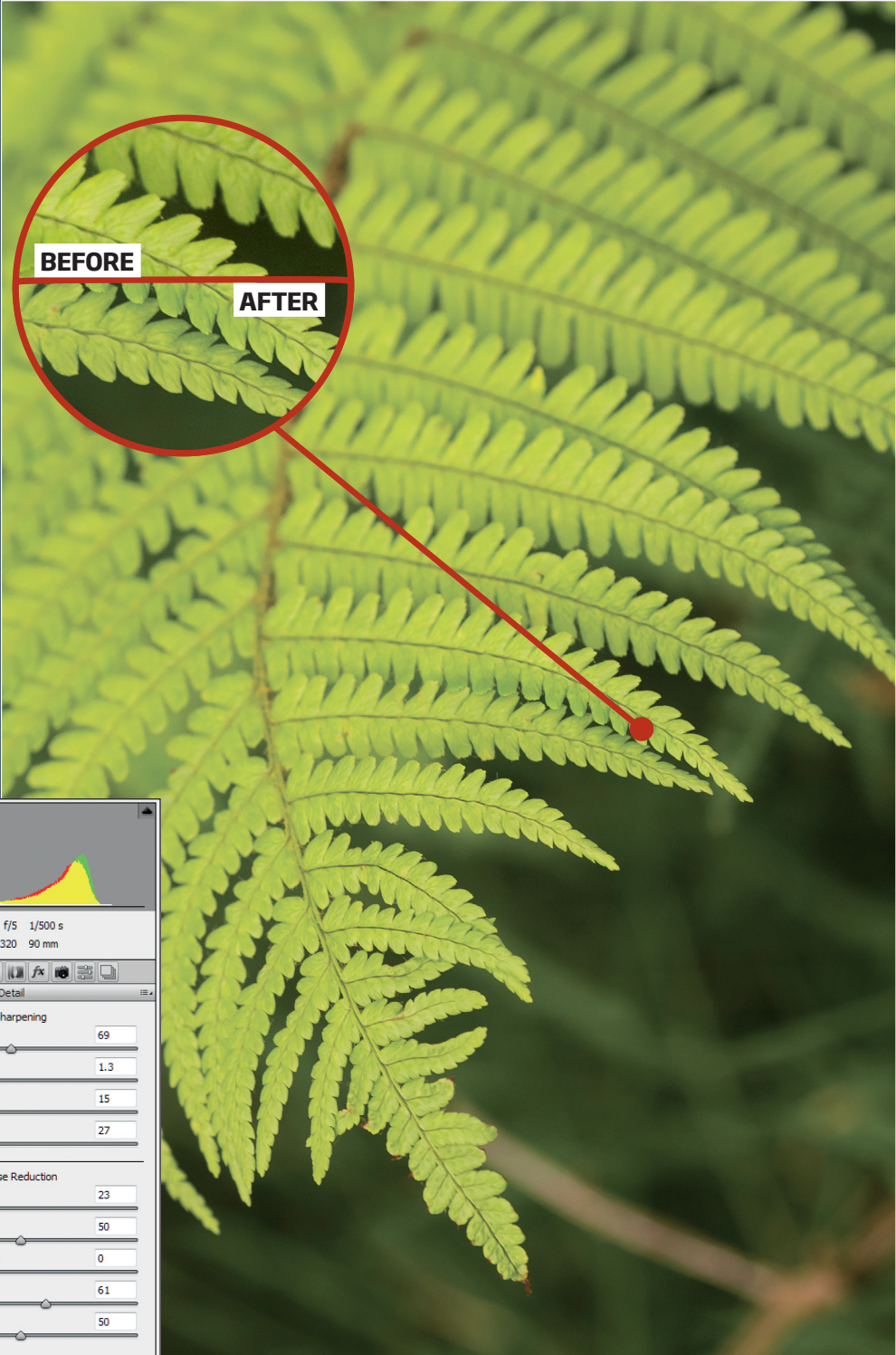Most images will benefit from a certain amount of sharpening. But how much?

In general, images with fine detail such as landscapes require less sharpening than images with soft detail, such as portraits. So for portraits, a typical setting would be Amount 35, Radius 1.2, Detail 20, Masking 70. For landscapes, try Amount 40, Radius 0.8, Detail 50, Masking 0. Of course, these settings are just a starting point. The level of sharpening required will depend on your subject matter and the camera resolution.

▷▷ Amount
Controls the strength of the sharpening effect. View the image at 100% when judging the amount. Double-click the Zoom tool to jump to 100%.

▷▷ Radius
Determines the number of pixels around the edge in which the sharpening effect is applied. A larger radius increases the chance of unwanted halos.

▷▷ Detail
Low Detail settings restrict sharpening to the more obvious edges. High settings will enhance finer details and texture.

▷▷ Masking
Allows you to restrict sharpening in less detailed areas of the image. Hold down **Alt** while dragging the slider to see the masked areas in black.

BEFORE
AFTER

R: ----
G: ----   f/5 1/500 s
B: ----   ISO 320 90 mm

Detail

Sharpening
Amount   69
Radius   1.3
Detail   15
Masking   27

Noise Reduction
Luminance   23
Luminance Detail   50
Luminance Contrast 0
Color   61
Color Detail   50
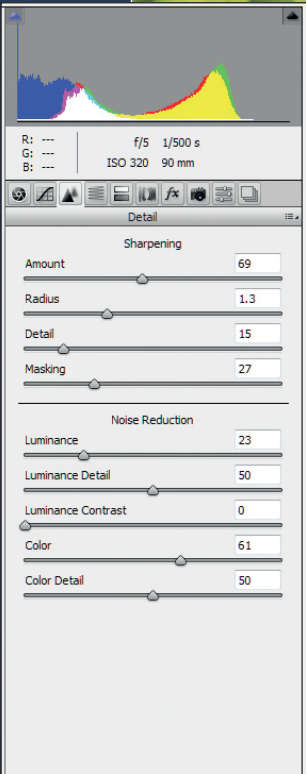
Fixing noise

If you're shooting at ISO 100 then noise isn't a problem for modern digital sensors, but if you have to push ISO to 400 or higher, or use a long exposure, then it's likely you'll begin to see more and more noise in your images. The forest scene here was shot at ISO 3200, so the noise is very visible, particularly in the shadow areas.

A bit of noise isn't necessarily a bad thing; it can add atmosphere to landscapes or create a gritty documentary-style effect. But large levels of noise can spoil a shot.

Fortunately, ACR has a range of excellent sliders that combat noise. The main tools for noise reduction in ACR are the Luminance and Color sliders. Luminance reduces grain and blotchy dots, while Color reduces unsightly spots of random colour. The trade-off to noise reduction can be slight blurring and loss of detail, so you'll need to decide whether to accept the noise, or attempt to correct it.

Sharpening and noise reduction are two sides of the same coin, so if you sharpen a noisy image it's likely that you'll increase the visibility of the noise. You'll need to strike the right balance between sharpening and noise reduction by experimenting with different sharpening amount and luminance settings. Toggle the Preview box on and off to judge the results.
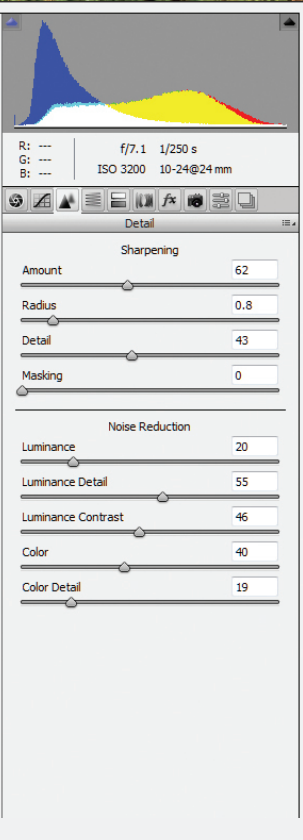

BEFORE
AFTER

▷▷ Luminance
The primary slider for noise reduction. Use this to reduce the effects of monochromatic noise, most often seen in shadows and areas of even tone.

▷▷ Luminance Detail
Higher luminance detail values can help to preserve details, but may increase noise. Lower values will give cleaner results but decrease image detail and texture.

▷▷ Luminance Contrast
A higher setting will increase contrast but can give blotchy results. Lower values will smooth details.

▷▷ Color
Targets and removes specks of colour noise. You can be more aggressive with Color than Luminance, as it doesn't affect details in the same way.

▷▷ Color Detail
Higher values preserve colour in edge detail but can lead to unnatural colour spots. Lower settings help to remove spots but can result in bleeding colours.

R: ----
G: ----   f/7.1 1/250 s
B: ----   ISO 3200 10-24@24 mm

Detail

Sharpening
Amount   62
Radius   0.8
Detail   43
Masking   0

Noise Reduction
Luminance   20
Luminance Detail   55
Luminance Contrast 46
Color   40
Color Detail   19

SELECTIVE CONTROL

Learn how to make selective adjustments to your Raw files with three essential tools in ACR
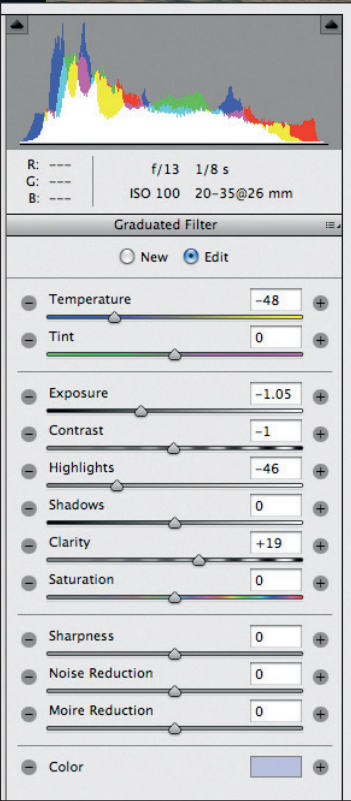
START IMAGE

Since the days of dodging and burning in the darkroom, making selective adjustments to different areas of your image has always been an essential skill for photographers. Before Photoshop CS4, adjustments made in ACR were limited in that you could only apply them to the entire image. But with the introduction of the Graduated Filter and Adjustment Brush, ACR suddenly became a whole lot more useful.

In ACR version 7 (which comes as standard with CS6) the Adjustment Brush and Graduated Filter tools have been improved with extra options to adjust white balance, making it easy to selectively correct white balance and warm or cool an image.

The tools have been used here to cool down the sky and add warmth to the land, and to tease out details in the foreground. We've also used the Targeted Adjustment tool to boost the saturation of the orange colours in the sky.

> "The tools have been used here to cool down the sky and add warmth to the land"

GRADUATED FILTER

The Graduated Filter lets you plot a gradient over an area then change the tones. As well as altering exposure, you can also make useful tweaks to things like white balance, sharpness and colour saturation. What's more, you can set more than one gradient, which makes it easy to change different areas or create a retro film-style border as we've done here.

Graduated Filter tips
Hold **Shift** while dragging a gradient to keep it perfectly horizontal, vertical or at a 45 degree angle.
Click on a gradient to alter any of the adjustment settings, or hit **Delete** to remove it.
The tool remembers the last-used settings, which isn't always helpful. Double-click any slider to quickly reset it.
Hit **V** to toggle the gradient overlay guidelines on or off.

ADJUSTMENT BRUSH

The Adjustment Brush is perhaps the most powerful tool in ACR. Use it to selectively alter areas of an image. It behaves in much the same way as the Graduated Filter (note that the tonal settings for each are identical). Except rather than plot a gradient, you paint a mask. Each mask is represented by a pin. These pins and their masks can be added to, altered, or deleted.

Adjustment Brush tips
Check '**New**' to start painting a fresh mask, '**Add**' to continue painting a mask, and '**Erase**' to remove parts of it.
Hit **Y** to toggle the visibility of the currently selected mask overlay.
Check **Auto Mask** for automated assistance when painting a mask. The tool will snap onto edges, lines and shapes.
Use the number keys to quickly set a density for your brush: Hit **1** for **10%**, **2** for **20%** and so on.

WHITE BALANCE

ACR is the best place to correct white balance for realistic-looking colours. But as well as adjusting white balance over the whole image, the Graduated Filter and Adjustment Brush also give you selective control. Not only is this useful for cooling tones in a sky or warming tones in land – as we've done here, it's also great if you have a scene with different light sources, such as a portrait captured with a mix of daylight and tungsten lighting.
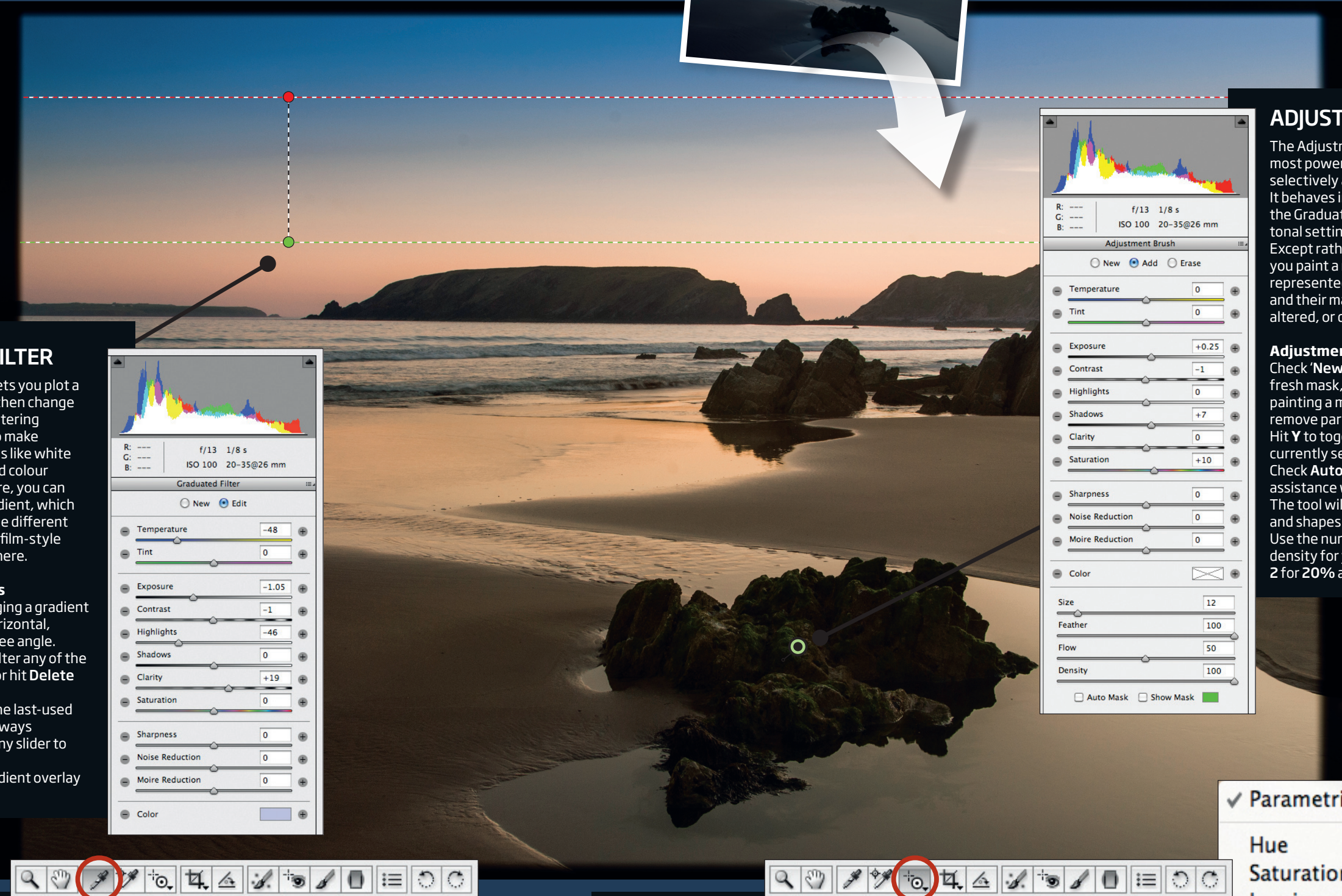
White Balance controls
Temperature
Drag left to cool tones and right to warm them.

Tint
Allows you to fine-tune white balance to compensate for a green or magenta tint.
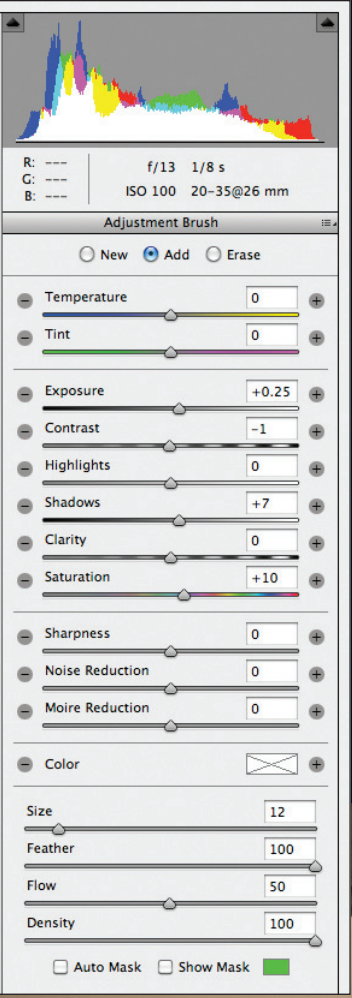
White Balance tool
Click on a tone that you know to be white or neutral grey. ACR will then detect the correct temperature.

TARGETED ADJUSTMENTS

ACR's sliders aren't the only method for adjusting tones. If you prefer interactive control, there is an alternative. The Targeted Adjustment tool lets you click and drag within the image to target and alter specific colours or tonal ranges. Dragging left or down decreases values, right or up increases them. Grab the tool from the Toolbar then right-click for five sets of parameters:

Parametric Curve
Drag to lighten or darken Highlights, Lights, Darks, or Shadows.

Hue
Target and alter the Hue of eight different colour ranges.

Saturation
Increase or decrease the Saturation of specific colours in the image.

Luminance
Make colour ranges lighter or darker by dragging left or right over them.

Greyscale Mix
Convert to mono then target colour ranges to lighten or darken.

✓ Parametric Curve ⌥⇧⌘T
Hue ⌥⇧⌘H
Saturation ⌥⇧⌘S
Luminance ⌥⇧⌘L
Greyscale Mix ⌥⇧⌘G

RETOUCH IN RAW

Use the powerful Adjustment Brush to give your portraits a pro makeover

Enhancing portraits is all about making selective adjustments to certain areas of the face. It can be helpful to think of the face as a series of zones, each requiring a particular edit. You'll lighten the eyes, soften the skin, boost the lips and sharpen the lashes. You might think the best place to make these changes is in Photoshop, but ACR also has a few powerful retouching tools. In fact, using ACR, it's possible to perform a complete retouching workflow without even entering the main Photoshop interface. What's more, by making tweaks in ACR rather than in Photoshop, you'll ensure the best possible quality. And because ACR is so neatly organised, easy to navigate, and totally non-destructive, you may find it's the ideal choice for enhancing your portraits.

Sharpen the lashes
Paint over the lashes with the Adjustment Brush, then use the sliders to sharpen and add Clarity.

| Clarity | +18 |
| Sharpness | +25 |
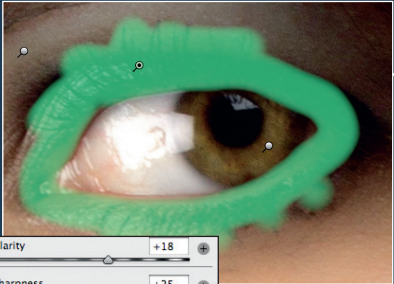
Lighten the whites
Carefully paint over the whites of the eyes, then increase Exposure and Highlights to lighten the whites.

| Exposure | +0.20 |
| Highlights | +20 |
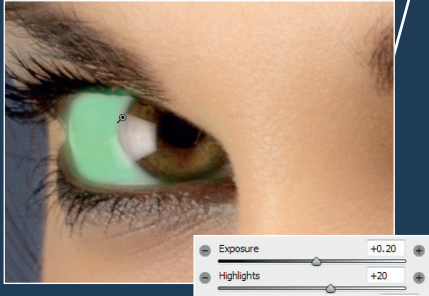
Soften the skin
Drag the Clarity slider down to soften the skin, and increase Exposure slightly to lift the tones.

| Exposure | +0.10 |
| Clarity | -35 |

Add make-up
Paint a mask over the cheeks, then introduce red with the Color Picker. Add blue to the eyes in the same way.

| Temperature | -100 |
Tint	-54
Exposure	+0.20
Highlights	+36
Saturation	+12
Color	

Temperature	-10
Highlights	+21
Saturation	-30
Color	
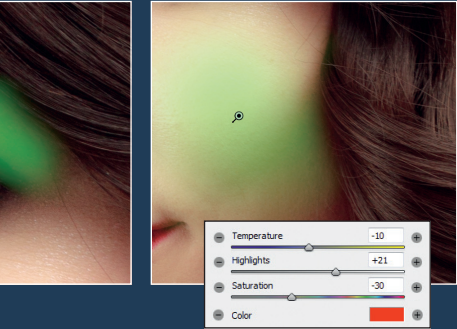
Enhance the irises
Boost the colour, contrast and detail in the irises, but keep the circular edges dark.

Exposure	+0.60
Contrast	+16
Clarity	+34
Saturation	+50

Boost the clothes
Use the temperature and Saturation sliders to warm the hues in the jumper. Increase Clarity and Highlights.

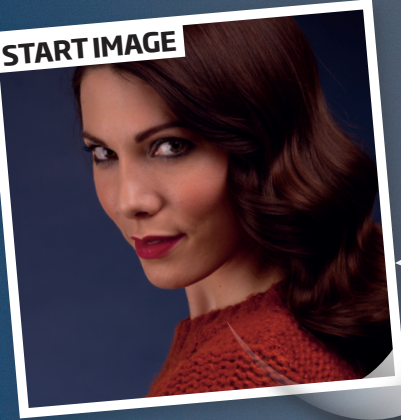| Temperature | +23 |
Highlights	+30
Clarity	+35
Saturation	+62
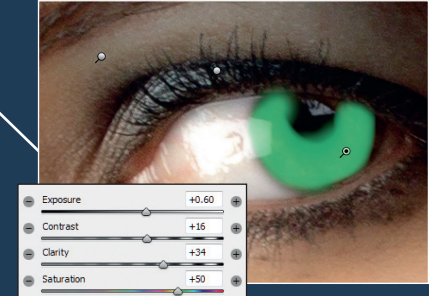
Improve the lips
Boost the colour in the lips. Paint a precise mask to cover them, then increase Saturation and Clarity.

Highlights	+25
Clarity	+35
Saturation	+54
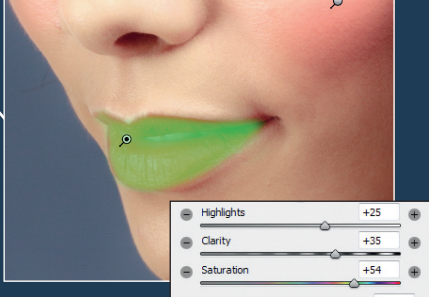
"You can edit a mask's settings at any time"

START IMAGE

HOW TO PAINT A MASK

Most retouching work in ACR is done with the powerful Adjustment Brush. It allows you to paint a mask over an area, and then apply changes to it, so it's ideal for retouching a face. We've used it here to soften the skin, boost the eyes, enhance the lips and even add digital blusher. The Adjustment Brush works by setting pins, each of which represents a mask. To set a pin, click over the part of the image you want to change, then paint over the rest of the area. It can be helpful to check Show Mask while you're painting, so you can see where the mask is operating. It also helps to set an obvious mask colour – such as the garish green we've used here – by clicking the colour picker next to the Show Mask check box.

When painting, use the] and [keys to resize your brush tip (hold down **Shift** and] or [to change the hardness). To erase parts of the mask, hold down **Alt** and paint. You can use the resizing shortcuts for the Eraser, too. When you're happy with your painted mask, uncheck Show Mask, then make your adjustments using the sliders on the right. To add more pins, check New at the top right. The tool remembers the last-used settings, so be careful to reset the sliders each time you want to make a different adjustment. You can edit any mask's shape or settings at any time by clicking the related pin.

RAW SMART OBJECTS

Get to grips with image blending using one Raw file and Smart Objects

Raw files processed through ACR can be opened into Photoshop as Smart Objects. This means that you have the option to bring the image from Photoshop back into ACR at any time, simply by double-clicking the Smart Object thumbnail in the Layers Panel.

There are several advantages to working this way. First and foremost, it means you can change your mind about any edits made in ACR, such as a crop or sharpening settings. But it also opens up more creative possibilities. By duplicating the Smart Object layer, you can combine different treatments made in ACR using Blend Modes. Don't worry if this sounds complicated, in practice it's very easy. Within minutes you can transform a flat scene into a punchy, detailed landscape. Here's how it's done.
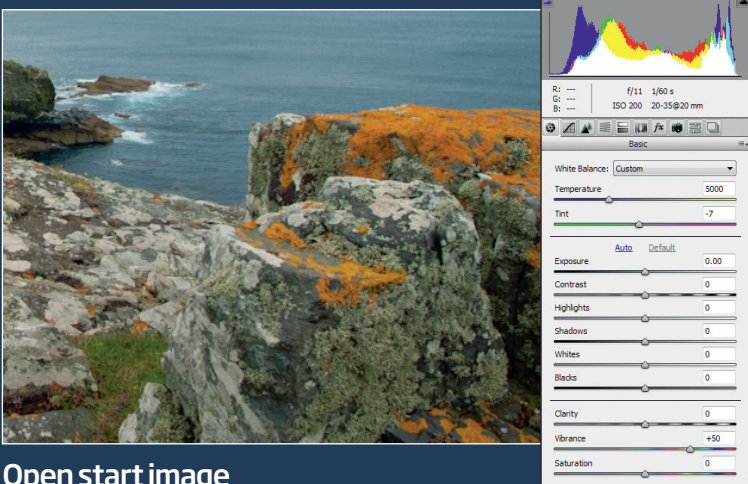
START IMAGE

Open start image
01 Open 'coast_before.DNG' from our project files into ACR then set Temperature to 5000, Tint -7, Vibrance +50.
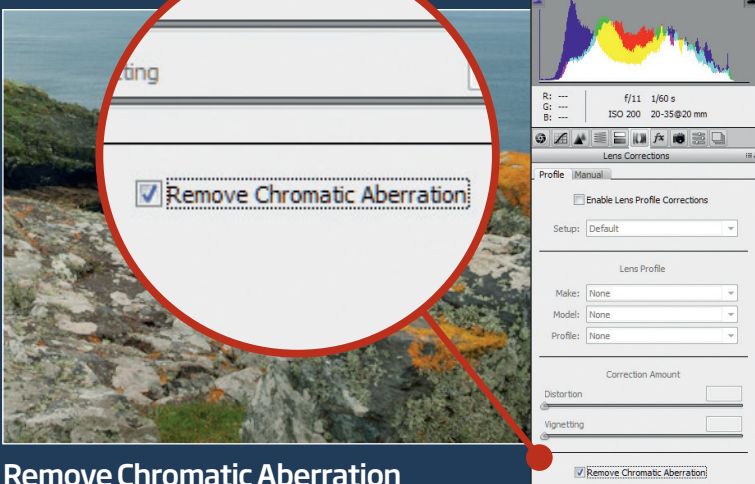
Remove Chromatic Aberration
02 Go to the Lens Correction option in the menu and then check 'Remove Chromatic Aberration'.
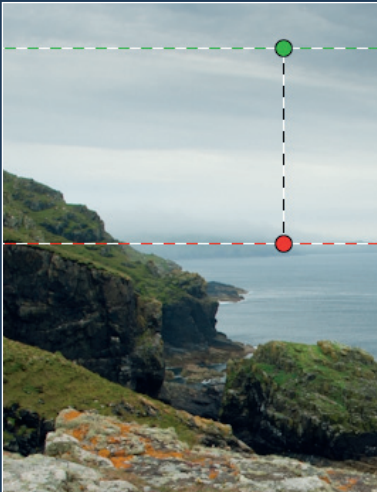
Graduated Filter
03 Click on Graduated Filter tool. Hold Shift then drag a line from sky to land. Set Exposure to -1.35. Hold Shift and click 'Open Object'.
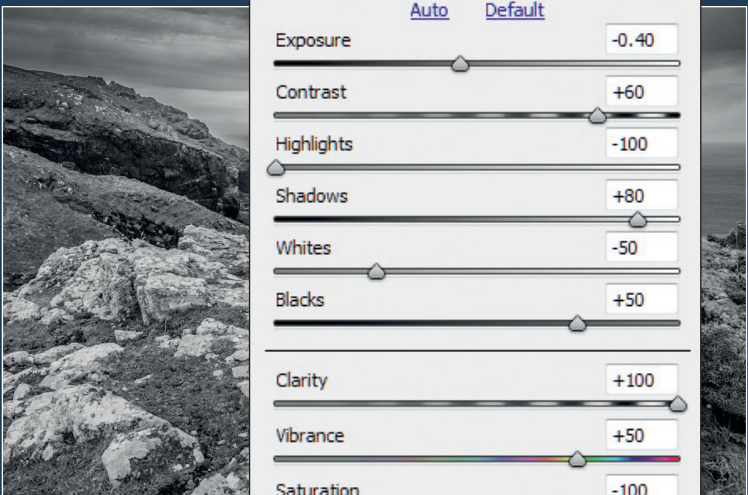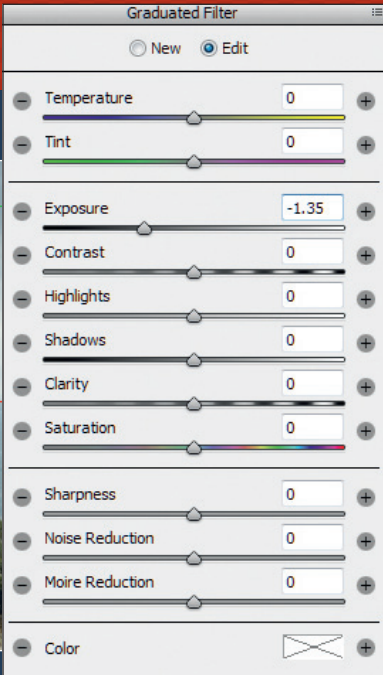
Tonal tweaks
05 Set Exposure -0.40, Contrast +60, Highlights -100, Shadows +80, Whites -50, Blacks +50, Clarity +100, Saturation -100.
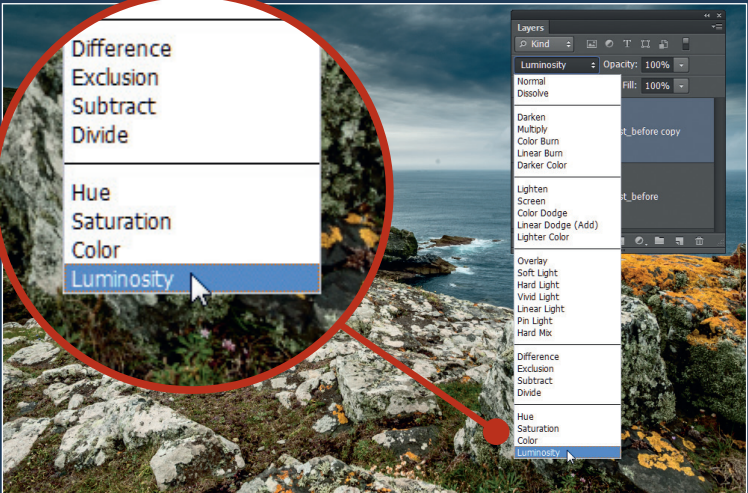
Luminosity Blend Mode
07 In the Layers Panel, click on the Blend Mode drop-down and then choose Luminosity.
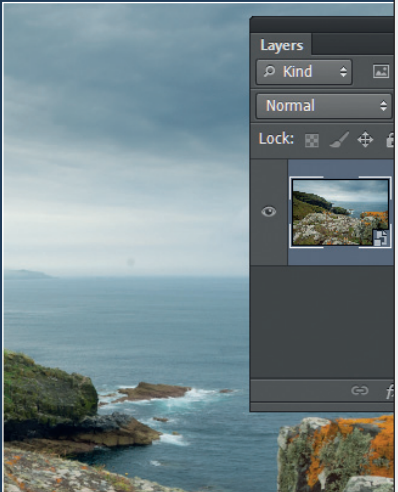
New Smart Object
04 In the Layers Panel, right-click the layer and choose New Smart Object via copy. Double-click copy's thumbnail to go back to ACR.
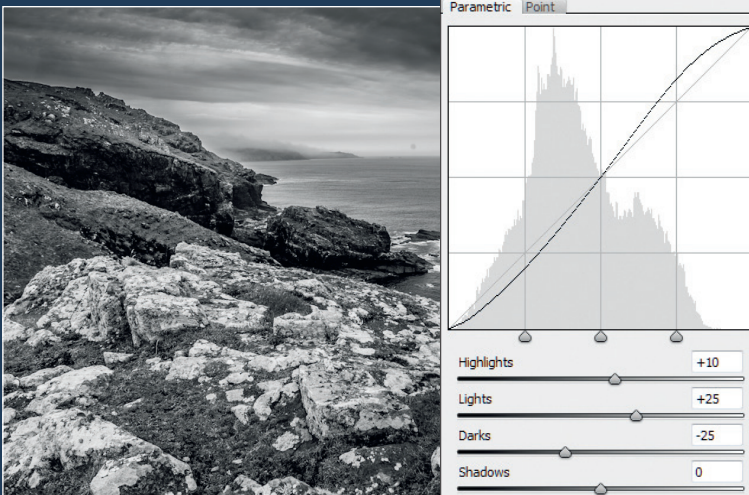
Make Tone Curve Panel adjustments
06 Go to the Tone Curve Panel. Under Parametric, set Highlights +10, Lights +25, Darks -25. Click OK.
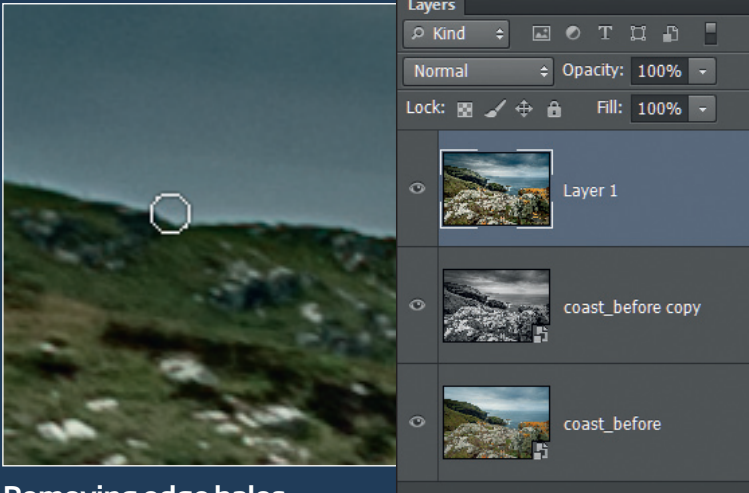
Removing edge halos
08 To fix unwanted halos, press **Cmd/Ctrl+Shift+Alt+E** to merge a copy of the layers, then grab the Burn tool. Set Range: Highlights, Exposure 10%, and brush carefully over the edge halos.
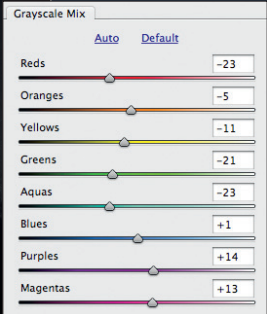
START IMAGE

FIVE CREATIVE RAW EFFECTS

Learn how to add a variety of cool creative effects using nothing more than the tools in Adobe Camera Raw

◁◁ **Black and white**
01 ACR is a great place to make your mono conversions. It's just like using a Black and White Adjustment Layer in Photoshop.
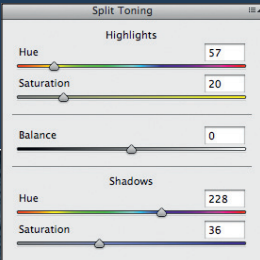
▷▷ Go to the HSL/Grayscale panel and check Convert to Grayscale box. Use the colour sliders to tweak the tones and the Adjustment Brush to simulate the Dodge and Burn tools.

Grayscale Mix

Auto   Default

Reds	-23
Oranges	-5
Yellows	-11
Greens	-21
Aquas	-23
Blues	+1
Purples	+14
Magentas	+13

◁◁ **Cross process**
03 This popular technique references a chemical process from the traditional darkroom with characteristically skewed colours, saturation and contrast.

▷▷ To replicate this in ACR, go to the Tone Curve Panel and select the Point Curve window. Here you can tweak the individual Red, Green and Blue channels (see left). Once you're happy, save the effect as a preset.

Parametric Point
Curve: Custom
Channel: Green
Input: Output:

▽ **Split tone**
04 Adding a split tone is a great way to give your mono images a creative twist by adding different colour tints to the highlights and shadows.

▷▷ In the Split Tone Panel, use the sliders to target different colours and intensity for the shadows and highlights.

Split Toning

Highlights
Hue   57
Saturation   20

Balance   0

Shadows
Hue   228
Saturation   36

Adjustment Brush
○ New   ○ Add   ○ Erase

Temperature	-10
Tint	0
Exposure	-3.40
Contrast	-43
Highlights	-18
Shadows	+20
Clarity	+21
Saturation	+81

△ **Hand colour**
05 It might be hard to believe, but it is possible to replicate the look of a hand painted image in ACR.

▷▷ You'll need to make your image black and white, but do this using the Saturation slider in the Basic Panel rather than the HSL/Grayscale Panel. Next, select the Adjustment Brush and paint colour with a low saturation onto the image.

▷▷ **Solarised**
02 The inverted tones and haunting hues of a solarised image were popularised by the surrealist photographer Man Ray in the 1920's after a fortuitous darkroom mistake.
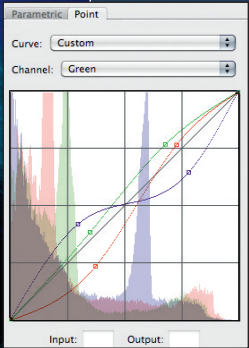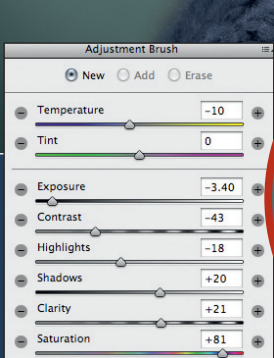
▷▷ Go to the Tone Curve Panel and skew the curve into an upside down U shape (see right). It's worth experimenting with the curve. Push and pull it to extremes and see what happens.

Parametric Point
Curve: Custom
Channel: RGB
Input: Output: