Photoshop Instant Expert

Photo Retouching with the Photoshop 5.5 Rubber Stamp Tool

By: Ben Willmore

Over the course of the next few months, we're going to delve into Photoshop's awesome retouching tools. We'll explore all seven of them and, of course, I'll throw in some extra goodies to make these tools much more useful and powerful.

The Rubber Stamp Tool

Let's start off with the class favorite—the Rubber Stamp tool. It copies from one area of your image and places it somewhere else, effectively creating a "clone," which is why so many people just call it the clone tool. This can be great for covering up all sorts of defects in your images. But, before you start retouching, you'll have to indicate what you'd like to clone. You do that by opt/alt-clicking on the area you want to copy. Then, the next time you click the mouse button, you'll see two cursors—a cross hair and a circle. Photoshop will copy whatever is under the crosshair and paste that information into the circle.

You have to be careful because Photoshop only looks at your image once. That means it might start cloning information that is no longer in your image—stuff you have already covered up with your cloning. If you'd like it to take a fresh look, then release the mouse button. That will make your changes (cloning) permanent, and then when you click again, Photoshop will take a fresh look at your image.

The Rubber Stamp tool will copy from under the crosshair and paste that info into the circle

If Photoshop starts to clone from areas that are no longer in the image, release the mouse button to have it take a fresh look

Retouching Brushes

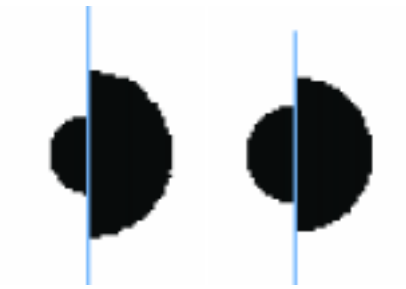
Before we get too deep in our exploration of the Rubber Stamp tool, we need to have a little talk about your brushes. First off, you'll want to make sure you get an accurate view of your brush when you're painting, so choose File>Preferences>Displays and Cursors, then set the Painting Cursors setting to Brush Size (the default setting in Photoshop 5.5). That will make it so that you get a circular cursor instead of a generic tool icon cursor.

If you pop open the Brushes palette (View>Show Brushes), you'll see that you can choose from soft or hard edged brushes. But watch out for those soft edged brushes. They are much "softer" than you might think. The circular

The left side represents the only area that is 100% opaque, after that your brush begins to fade out and doesn't stop until the black gunk ends on the right side. Your cursor shows up halfway through the fadeout

cursor isn't an accurate representation of your brush because it only shows you where the brush is halfway faded out. To see what's really happening, take a peek at the special image I created (opposite page).

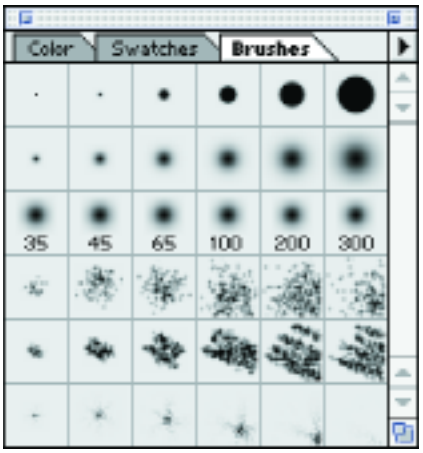
If you just use the default settings, you'll find that a lot of grain seems to be destroyed in the areas you have retouched. They will appear to be less sharp than the rest of the image. You have complete control over how much your brush fades out, so just double-click on your chosen brush in the Brushes palette and change the hardness setting. I usually use settings between 50 and 70 for retouching, but you should experiment to find which settings work best for you. Higher hardness settings will preserve more grain and do a better job of blending your retouching into the rest of the image.



Left: Hardness=50; right: Hardness=70

You might even want to double-click on all the soft-edged brushes and set them to the same hardness setting (around 50). Then you can choose Save Brushes from the side menu of the Brushes palette and give them a name. When you're done retouching, you can reset your brushes (from the same side menu) because you might not like those brushes for everything. Then, when you're about to start retouching again, all you have to do is choose Replace Brushes from the side menu and you'll be back to the brushes that have been optimized for retouching.

Photoshop 5.5 comes with some extra brushes at the bottom of the Brushes palette. I think they were created by Jack Davis, who wrote *Photoshop Wow Book* (Peachpit Press). Even though I think these brushes are cool, they can also get in my way.



Delete the bottom brushes by cmd/ctrl-clicking on them

I prefer to have the Brushes palette closed and just use keyboard commands to change the active brush. Try it out—just press the bracket key ([ ) multiple times and see what happens in the Brushes palette. Each time you press it, you should get the brush that's to the left of the one that was active. You can also press the end-bracket key ( ]) to go the other direction.

Now here's where those extra brushes get in the way. If you hold down the shift key when pressing the bracket keys, you'll get the first or last brush in the Brushes palette. I usually do that to switch between hard- and soft-edged brushes, but those extra brushes at the bottom get in my way. So, I often delete them by cmd / ctrl-clicking on each brush. But don't do it too fast, otherwise Photoshop will think you are trying to double-click a brush to get its options.

There's another sticking point with Photoshop's brushes—they are perfectly round. That can make it easy to spot the areas where you have retouched because you don't often find perfect circles (or straight lines) in nature. To avoid that, you can create your own "custom" brushes. Start by creating a new grayscale document and reset your foreground color to black.

Next, choose a soft-edged brush and click once in the middle of your image using the Paintbrush tool. Now, apply one of Photoshop's distortion filters (Filter>Distort>Ripple, etc.) using very low settings. Finally, use the Marquee tool to select that area of your image and then choose Define Brush from the side menu of the Brushes palette. I'd use this type of brush when attempting to remove small blemishes that might only take a single click of the mouse. That way, you won't see an obvious circle where you clicked.

Apply the Ripple filter to distort your brushes

Now that you have your brushes all sorted out, all you have to do is figure out when to use each one. Well, whenever you are retouching an area that has a distinct edge that doesn't blend into the surrounding image (crisp edge), you'll want to use a crisp-edged brush so your retouching stops abruptly. Or, you can make a selection around the edge of the object to make sure you won't get any overspray beyond

that object. Then you could use a soft-edged brush to make sure your retouching blends into that object, but doesn't go beyond its edge. Then I'd use the odd shaped brushes for getting rid of any obviously repeated retouching artifacts, but we'll talk about that in a little while.

I also suggest that you act like a drunk when retouching. Really! Smooth strokes can be easy to see whereas erratic strokes blend into the image (no straight lines to find).

Don't Over Do It

When you're trying to cover up a defect in your image, be sure to clone from multiple areas. I usually end up opt/alt-clicking dozens of times, even if I'm just getting rid of a small scratch on my image. If you just opt/alt-click once and apply it all over the place, then it will almost always be obvious because you will see many repeated shapes.

Also, be sure to clone from an area that is very close to the area you are retouching. That will help to make the brightness and focus match as closely as possible.

Be sure to clone from many areas when attempting to cover up something. Red arrows indicate where I would clone from

Sometimes you'll run across an object that shouldn't be removed but you'd like to minimize its overall impact. In that case you might want to lower the opacity of the Rubber Stamp tool so you don't completely cover it up. You can quickly change the opacity of the Rubber Stamp by pressing the number keys on your keyboard (1=10%, 3=30%, 23=23%, etc.).

Left: original image; right: Area under eye lightened by cloning from lower skin area with low opacity

When you run across a straight line that you need to extend, be very careful where you clone from. Try this out: Press the caps lock key (which should give you a crosshair), then move your cursor until it's centered on the line and opt/alt-click. Move to the area where you need to apply the line and move your cursor into position, BUT, don't click yet. If you did, you'd be stuck with a crosshair the whole time you're retouching. Instead, once you get the cursor in the right spot, release the caps lock key and click the mouse button without moving the mouse. Then, if you need to clone in a straight line, click once and then Shift-click somewhere else and Photoshop will connect the "dots" with a straight line.

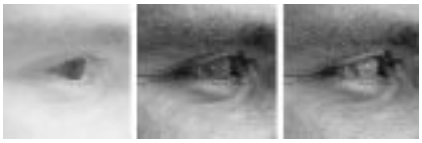
Watch For Sharpening

If you find that most of your images are difficult to retouch, then you just might have a scanner that automatically sharpens your image—mine does. That's not a good thing. You'll want to search through your entire scanner software, clicking on every button and searching every menu until you're sure it's not sharpening your images. The second I turned off auto sharpening on my scanner, my retouching work became much easier. Sharpening exaggerates all the defects, making it harder to retouch them out.

Left: Unsharpened image; right: Auto sharpened when scanned

You should also color correct your image before retouching it. Otherwise it will be much harder to determine which areas need work, and you'll find that future color correction might expose your retouching.

You might also want to click through the different channels of your image (Window>Show Channels) to see if the problem area shows up more in one channel than another. For instance, you'll usually find the noise from digital cameras showing up mainly in the Blue channel. So, why not just retouch that channel and leave the others alone? It can also be useful to check the channels after you're done retouching to make sure you don't see any artifacts (non smooth transitions, etc.). When you're all done playing with the individual channels, then click on the top-most channel to get back to a full color view of your image.



Right to left; Red, Green, Blue channels

Get A Good View

Retouching is something you really should do when zoomed into your image; otherwise you can't see all the detail. But if you're like me, you'll still want to get the big picture while you're retouching. Thank goodness Photoshop allows you to have two views of your document at once. Just choose

View>New View and then zoom out on one version and zoom into the other. If you'd like a zoomed out view that floats above your document window, then open the Navigator palette (Window>Show Navigator) and resize it by pulling on the lower right corner. It will show you which part of the image you are looking at by putting a red box around that area on the thumbnail image. You can even drag that box to scroll around your image, or Command/Ctrl-drag on the thumbnail image to zoom into a particular area.

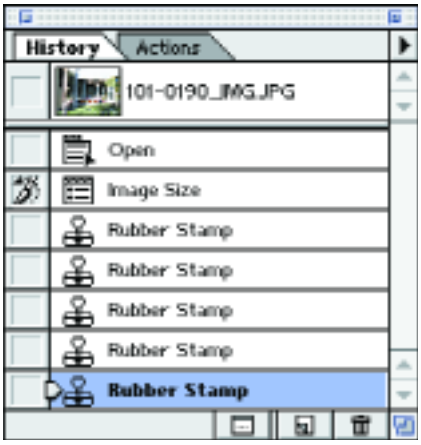
Use the Navigator palette to view the entire image while you're zoomed in on the main image window

When you're zoomed in on your image, you can hold the spacebar to temporarily access the hand tool to scroll around. Or, if you'd rather scroll just using your keyboard, you can press the home key to move to the upper left corner of your image, or the end key to get to the lower right corner. Then you can use the page down key to scroll one screenful down, or use shift-page down to scroll only 10 pixels down. And, of course, page up will scroll up one screenful. To move sideways, try using cmd/ctrl-page up and page down.

The amount of magnification at which you view your image is very important. Views that are in increments of 100% will be the most accurate (100%, 200%, 300%, etc.), otherwise the view of your image might appear jaggy when the actual image is not jaggy.

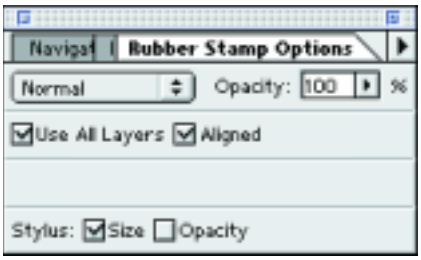
Fix Mistakes

If you end up making a mistake in the middle of cloning a large area, you're not limited to undoing the entire stroke. You can instead grab the History Brush (directly to the right of the Rubber Stamp) and bring any area back to what it looked like when you opened it. If you get a "no" symbol when attempting to use the History Brush, then you must have either changed the mode of your image or resized it since you opened it. If that's the case, open the History palette (View>Show History) and click just to the left of the bottom-most step that isn't called Rubber Stamp. You can also select an area, choose Edit>Fill and select History from the Use pop-up menu.



Click to the left of the bottom-most history step that is not called Rubber Stamp

I find it easier to undo retouching by doing it all on its own layer. The only problem is that with default settings, the Rubber Stamp tool can only clone from a single layer—the one that's active. So when you create a new layer, it has nothing to clone from. You can instruct Photoshop to clone from all the visible layers by turning on the Use All Layers checkbox (double-click on the Rubber Stamp tool to access its options palette). When you do that, Photoshop will copy from all the layers, but it will only deposit the change on the layer that's active. That also makes it easier to adjust the brightness of the area you've retouched. Just choose Image>Adjust>Levels and move the middle slider to change the brightness of the area you have retouched. Levels only works on a single layer, so it will change the retouched information without affecting the rest of the image.



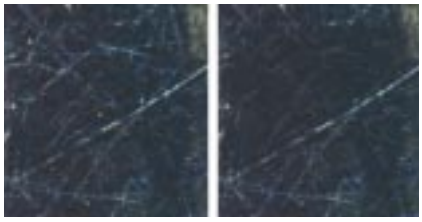
Use All Layers allows the Rubber Stamp to clone from all the visible layers and put the result on the active layer

Since the Rubber Stamp usually only copies from a single layer (with the Use All Layers checkbox off), that means you can clone from one layer and apply the changes to another. Just opt/alt-click on your image when one layer is visible and then make another layer active before you start applying the retouching. You can even clone between documents that are in the same color mode (RGB, CMYK, etc.). Just opt/alt-click on any open document then apply it to any other image. That way you could steal the sky from one image and apply it to another.

Don't Limit Your Choices

The Blending Mode menu (top left of the options palette) can be extremely useful when using the Rubber Stamp tool. Darken will compare the information you are applying to the area you are covering up and only allow the darker information to show up. That can help to avoid repeated shapes because you don't end up with an exact copy of the area you

are cloning from—you only get the darker areas. That can make it easier to cover up bright scratches without having to be overly careful. Lighten will do the opposite, only replacing areas where it can lighten—very



Left: original; right: top portion retouched using Darken mode and cloning from area of diagonal scratch area

good for retouching dark defects.

When you need to retouch a large area, you can expand your options. This is when you'll want to stop using the Rubber Stamp tool and start making selections and copying to new layers. After you make a selection, you'll want to choose Select>Feather and use a low setting (between 3 and 5) to make sure the edge of your selection blends into the rest of the image. Then you can choose Layer>New>Layer Via Copy to place that area onto a new layer. Use the Move tool to move it into place. Then, don't be afraid to rotate that layer, flip it horizontally, or scale it to fit an area (use the Edit>Transform menu). Once everything looks right, you can make things permanent by choosing Merge Down from the Layer menu or from the side menu of the Layers palette. You can even access it from the side menu while the Layers palette is collapsed at the bottom of your screen.

Check for Consistency

When you're done using the Rubber Stamp tool, you might think you're done with your retouching—not quite. Now you should evaluate how well the retouching blends into the rest of the image. Things to look for include: focus, grain, lighting, shadows, perspective, etc. If you find a discrepancy, then you might want to grab the Blur tool, or use the Dodge and Burn tools (which we'll cover in a future Instant Expert article).

You'll also need to zoom in and make sure there are no obviously repeated shapes. If there are repeated areas, then get an odd shaped brush (like the custom ones I showed you how to create) and clone from multiple areas to cover them up. But only clone from tiny areas, otherwise you'll just create more repeated shapes. The idea is to distort the shape of things instead of trying to completely replace them.

Look out for repeated shapes and distort those areas until they are no longer identical

If you'd like to compare the original version of your image to the retouched version, try this Choose Edit>Fill and set the Use pop-up menu to History. Now type cmd/ctrl-Z multiple times to switch from the retouched to the unretouched versions of your image. If the History option is grayed out when trying to fill your image, then you must have resized or changed the color mode (RGB to CMYK, etc.). If that's the case, you can go back multiple steps by typing opt/alt-cmd/ctrl-Z multiple times and then type cmd/ctrl-Z to toggle between the old version and the current version of your image.

Make It All Blend In

Once you're done making repairs, you can camouflage your retouching efforts by adding noise to your image. But you don't want to use any ordinary noise, so try this: Start by creating a new layer, choose Edit>Fill and set the Use menu to White. Now choose Filter>Noise>Add Noise and use a medium amount with the Monochromatic checkbox turned on. Then choose Filter>Noise>Despeckle, choose Filter>Blur>Gaussian Blur and use a setting somewhere below 1. Now set the blending mode of that layer to Overlay and then lower the opacity until it blends into the image.

Top; Image with noise added, Bottom; retouched image without noise

Another trick is to scan your image at a much larger size than it actually needs to be, and then scale it down after performing any retouching. That way all the retouching is blended into the rest of the image and is much more difficult to detect.

The Aligned Checkbox

You might think we're all done talking about the Rubber Stamp tool, but we're not. We haven't

talked about the Aligned checkbox yet. I don't use this checkbox all the time, but it can be very useful when you need to duplicate part of you image multiple times. It can be great for adding additional buttons to a shirt, extending an unfinished fence, adding six eyeballs to your forehead, etc. Just opt/alt-click on the area you would like to clone and then each time you release the mouse button, it will reset the clone tool, forcing it to clone from the original area.

Turning off the Aligned checkbox allowed me to clone the right-most circle multiple times by just releasing the mouse button between applications of the cloning

Pattern Stamp Tool

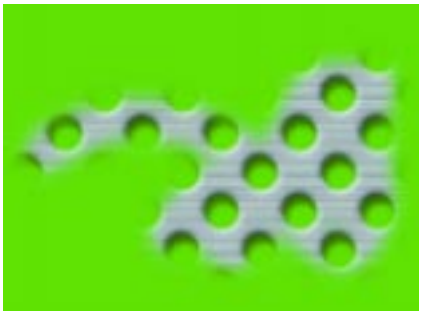
There is another tool grouped with the Rubber Stamp, just click on hold on top of that tool and you'll find the Pattern Stamp tool. This is another one that I don't use all that often, but it can still be useful.

Click and hold on the Rubber Stamp tool to find the Pattern Stamp tool

If you try to learn this one on your own, you just might be out of luck. That is because the Pattern Stamp tool needs you to first define a pattern before you can use it, otherwise it will just complain every time you attempt to use it.

To define a pattern, select an area that you would like to use as a pattern and then choose Define Pattern from the Edit menu. Then, when you use this pattern, Photoshop will tile that pattern over and over to fill the area where you paint.

You must define a pattern before using the Pattern Stamp tool



Here's an example of a repeatable pattern

When you use the Pattern Stamp tool it will repeat (tile) the pattern in the areas that you paint.

I use the Pattern Stamp tool to add texture to areas and to create interface elements where I need a continuous metal look, etc. ◀

Ben Willmore is the author of the best-selling book *Official Adobe Photoshop 5 Studio Techniques* (Adobe Press) and the founder of Digital Mastery, a training and consulting group based in Boulder, Colorado. Find out if Ben is coming to your area with his "Master Photoshop In 3 Days" seminar by visiting *www.digitalmastery.com*.