![Zoner Photo Studio logo]

Zoner
Photo
Studio
Guidebook

Introduction

People took over 380 billion photographs in 2011—a full ten percent of all the pictures ever taken. Out of those 380 billion, only about one percent (4 billion) were taken on film.

Quite simply, the age of digital photography has arrived—so much so that now it's not just cameras that offer great picture quality: many telephones and tablets do too. With cameras in everything, the number of pictures we take a day is climbing rapidly. Today mobile devices with cameras are ordinary consumer goods... and increasingly, so are DSLRs.

Zoner Software, meanwhile, is celebrating its 21st anniversary this year. And back in 2002, we became digital photography specialists. The more photographers there are, the clearer it is that this was the right decision.

The more pictures people take, the more important it becomes to efficiently process and organize them. And that's why we make Zoner Photo Studio.

But in all this quantity, we shouldn't forget photos' key quality: they're captured memories.

The team here at Zoner is well aware that digital photos are more than just data, and we take care to treat them accordingly.

And the millions of satisfied users around the world who trust us with their photos are aware of the same.

The book you're reading now is about Zoner Photo Studio. But actually, the basic steps given here are useful in practically any photo software. That's because Zoner Photo Studio has a uniquely broad scope. But that also means that this publication is too short to present it in detail.

Fortunately we're also photographers and we work with Zoner every day. We've had the pleasure of communicating with many of you personally, through our support team and otherwise. That's given us insight into the most important, most interesting, and most typical problems—and how to solve them. We've taken this as the foundation for discovering what kind of book will benefit our readers the most. We listened carefully to what you wanted to learn to do in Zoner and how you wanted to learn it.

Because of this, this publication doesn't contain a few things you may expect. It doesn't contain Q&A, nor rundowns of every function and its settings. All that is covered on *magazine.zonerama.com* and skipping it leaves room for more important things.

Note that each chapter was written by a different author, so they differ a bit in style. Meanwhile, all the advice we give here has been "tested on (human) animals." Also, where Zoner offers more than one way to do the job, we describe the most effficient way.

The book's goal is not to describe everything that Zoner can do, but to help you orient yourself in the program overall and its most important features. Clearly, with examples, written for human beings.

We hope that we've succeeded in this goal, but you are the final judge. We'll be very glad if you let us know your impressions, opinions, suggestions, and ideas. There is contact information at the end of the book.

The whole Zoner Software team wishes you happy reading and good light!

Before We Start

The Interface

Zoner Photo Studio is all-in-one digital photography software designed for use by photographers of every skill level. It covers the complete photography workflow and practically every function needed for photo processing. And because of this, it's very large! Thus we'll start with a look at its interface.

Zoner Photo Studio is made up of what we at Zoner call "modules." Each of these has a switcher tab at the top right. You'll often work in only one of them in a session.
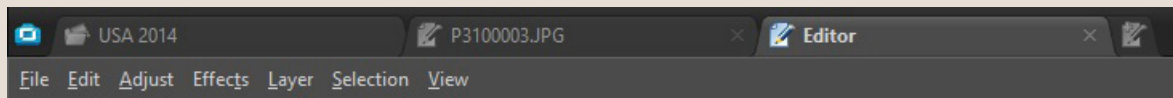
The Modules:

- **IMPORT** (bringing photos onto the computer),
- **MANAGER** (organizing and publishing),
- **VIEWER** (viewing and presentations),
- **EDITOR** (editing),
- **RAW** (developing pictures in the RAW format. The Home Edition does not contain this module.)

To switch modules, use the switcher at the program's top right.

At the program' top left, it lists tabs—"windows" you have open inside Zoner Photo Studio. For some modules, more than one tab can be open at once. This lets you work on several pictures at once so you can e.g. copy and paste between them. Another key item up here: your Zoner Account login info.

| Import | **Manager** | Viewer | Editor | RAW |
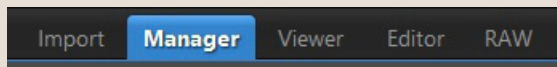
The module buttons, with the Manager currently active.

P3100003.JPG — Editor

File Edit Adjust Effects Layer Selection View

Open tabs. Click the blank-page button to open a new, empty Editor tab.

TRIAL | Not logged in ▾ 🛒 📶 ⚙ Settings ❓ Help

The right end of the toolbar, next to the module buttons, is another unchanging part of the interface:

Here you'll find two "screen" buttons, one to go fullscreen, and another to use a second monitor. The "radio wave" button indicates there are new articles on the _Zonerama.com magazine_. Next to it there are buttons for work with your license and your Zoner Account. After these come Settings and Help. We'll cover Settings in more detail in the next chapter.

■ Sort By—use this to set the photo sorting criteria. These are also used in slideshows and the Editor!

■ Thumbnail size—use this slider to resize the thumbnails in the Browser listing.

Buttons for the Manager's four different modes. The Browser is the most important.

■ Thumbnails—Small previews of the pictures you're browsing.

■ Quick Search—The fastest way to find a photo.

■ The Navigator—use the tree structure here to easily navigate your folders

■ Photo information—its EXIF data, size, etc.

Help contains the Help Contents item—the first place to look when you have a question about Zoner Photo Studio. Come here to learn which feature does what, how every feature works, and what their settings do, and read detailed feature descriptions that didn't fit into this book.

Many questions sent to the _Zoner Photo Studio support_ line can be answered with a look right here. But for some questions, contacting technical support is vital—so we let you do it straight from the Help menu. This is the ideal way to contact support, because along with your query, it sends information about your computer that can often be of key importance for problem-solving.

■ **The toolbox**—quick access to the mouse-based tools

■ **The Filmstrip**—thumbnails for all the pictures in the current folder

■ **The Side Panel**—contains tools and filter settings and a histogram. Can be expanded/collapsed.

The Program Preferences

Zoner's starting preferences—options about how it should behave—will already suit most users. But for the rest, there are many ways to customize its behavior. Let's take a look at the most common ones.

There are many near-universal settings and workflows out there, but we all have slightly different preferences. Zoner Photo Studio respects this and offers many kinds of customizations, under the **Settings menu's Preferences**… item.
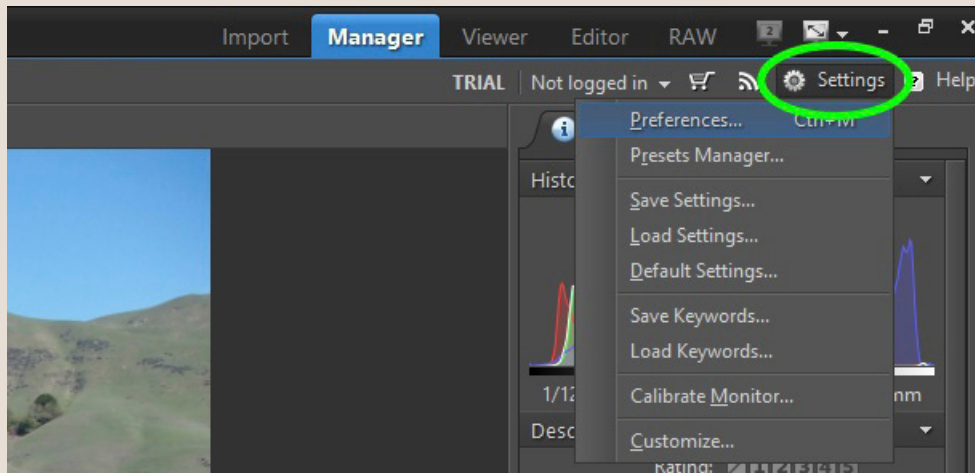
Let's start with the **Appearance** section. Fitting the settings here to your habits can make your work a lot more convenient. You can choose among several color schemes for the program. The default choice, Dark, is also the most popular. It's not just for its good looks; the dark interface gets out of the way and lets the pictures themselves shine.
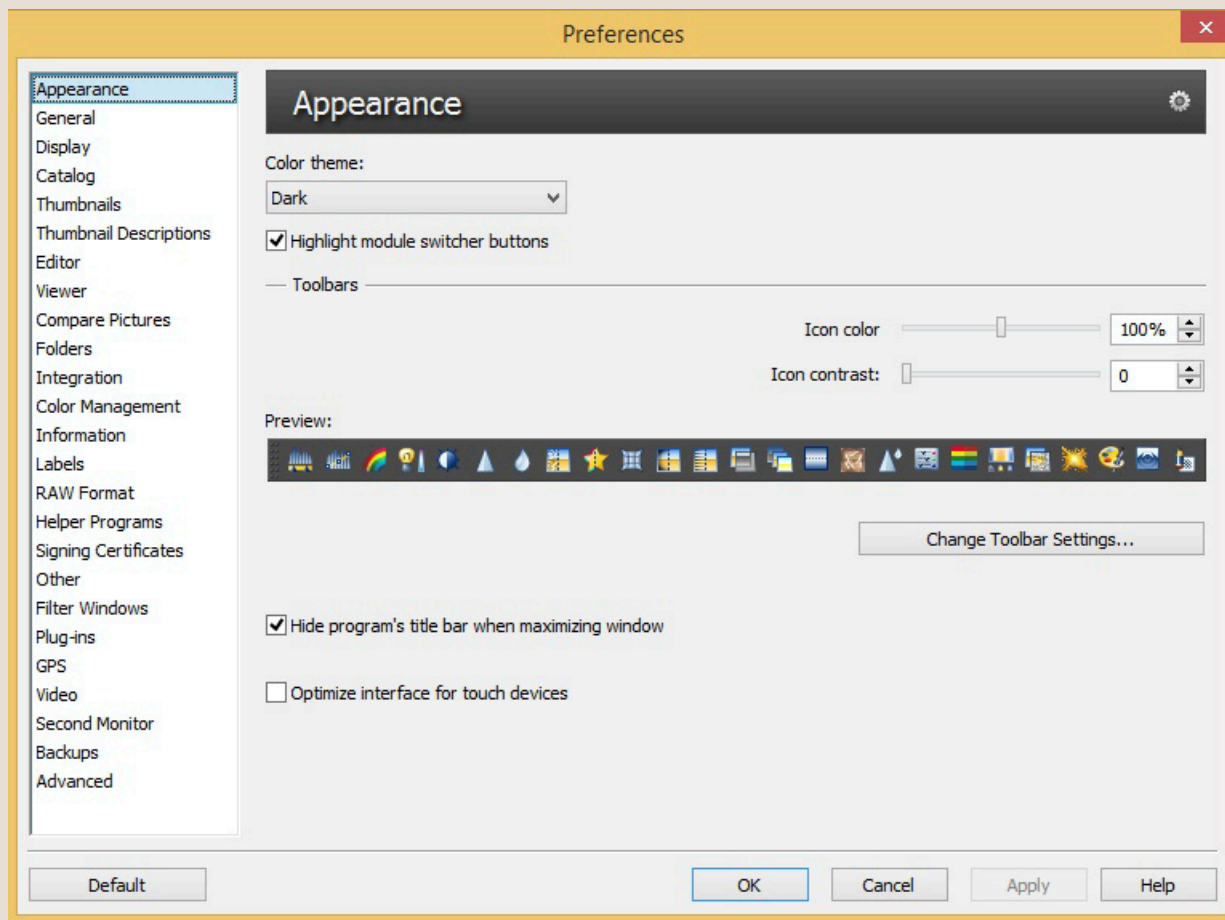
The color highlighting of the module switcher buttons can be turned off. Highlighting makes them easier to see, but it also can distract you from your photos.

You can also use the controls here to make toolbar button colors more or less saturated or adjust their contrast.

Click **Change Toolbar Settings**… here to reach a window for adding and removing toolbar buttons. This ability will be most appreciated by advanced users, who know their own workflow and what features they use the most.

But one option in the toolbar settings window is great for every user with weak eyesight. It's Large Icons—click it to make buttons and toolbars a bit bigger.

Click OK or Apply here to confirm your changes. If you change something, don't like it, and forget what it was, click Default to return the current section (e.g. Appearance) to factory settings.

Now let's look at the General section. Note the setting for how the Manager module reacts to a double-click on a photo. Normally this puts the Manager in Preview mode. (Pressing Enter, meanwhile, starts the Editor.) Our recommendation is to keep the default setting. Once you get used to it, it's the quickest of the three.

In the **Editor section**, take note of the Mouse wheel action item. Under default settings, the mouse wheel moves you among pictures. This can be annoying if your mouse wheel is highly sensitive. In that case, set it to zoom instead.

The Integration section contains a control named Set as default program for all supported file types. This is useful if you installed another program after Zoner, and you accidentally let it take control of your pictures.

If you have trouble playing videos in Zoner Photo Studio, you can either install more video codecs in Windows and hope they work, or avoid the problem completely by installing MPlayer and then switching Zoner to *MPlayer*-based support. Turn it on in the Video tab.

We'll talk about the **Backups** section more in another chapter; for now, note how you can check the space taken by your backups here, erase them all, or change where they are stored.

The last section, **Advanced**, includes a way to make Zoner use the your graphics card to speed up calculations. To simplify a bit: if you have a computer with a powerful graphics card, you can turn on this option to make Zoner use it to speed up certain operations that place high demands on your computer's calculating power.

Formats And Quality

Digital photographs are digital image files, and like all such files, they can be saved in various formats. Each format has advantages and disadvantages. Zoner Photo Studio can work with a large variety of image formats. But not all of them are strictly speaking photo formats.
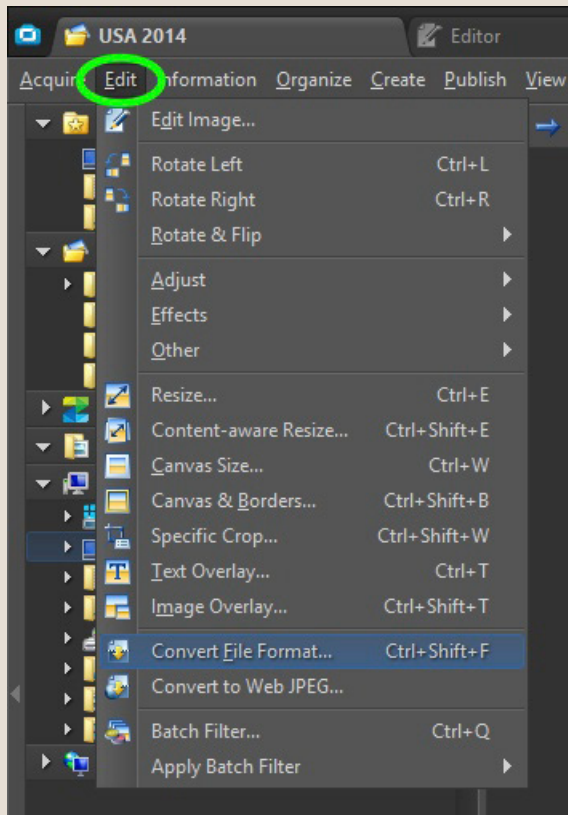
Digital cameras usually let you save pictures and information about them in three formats: JPEG, TIFF, and RAW. We'll talk about RAW in the next chapter.

The most common format connected with digital photographs is JPEG. So we'll look at that format first.

The JPEG Format

JPEG (which usually has a .jpg or .JPG extension) was invented for storing, in essence, photos. So it's no surprise that all digital cameras normally store pictures in JPEG.

As a normal, non-expert computer user, you may not be familiar with all the traits of the JPEG format. The most important trait of JPEG is that it is a "lossy" format.

A picture at maximum JPEG quality.

The same picture with its JPEG quality deliberately set very low.

"Lossy" means that the method used to compress JPEG files (make them small) always changes the picture at least a little, even if you use a high quality level.

You can usually choose the quality level when saving to JPEG, even in your camera. The higher the compression, the less space they will take on your camera's card or your computer's disk. And the more they will be changed—lowering their quality.
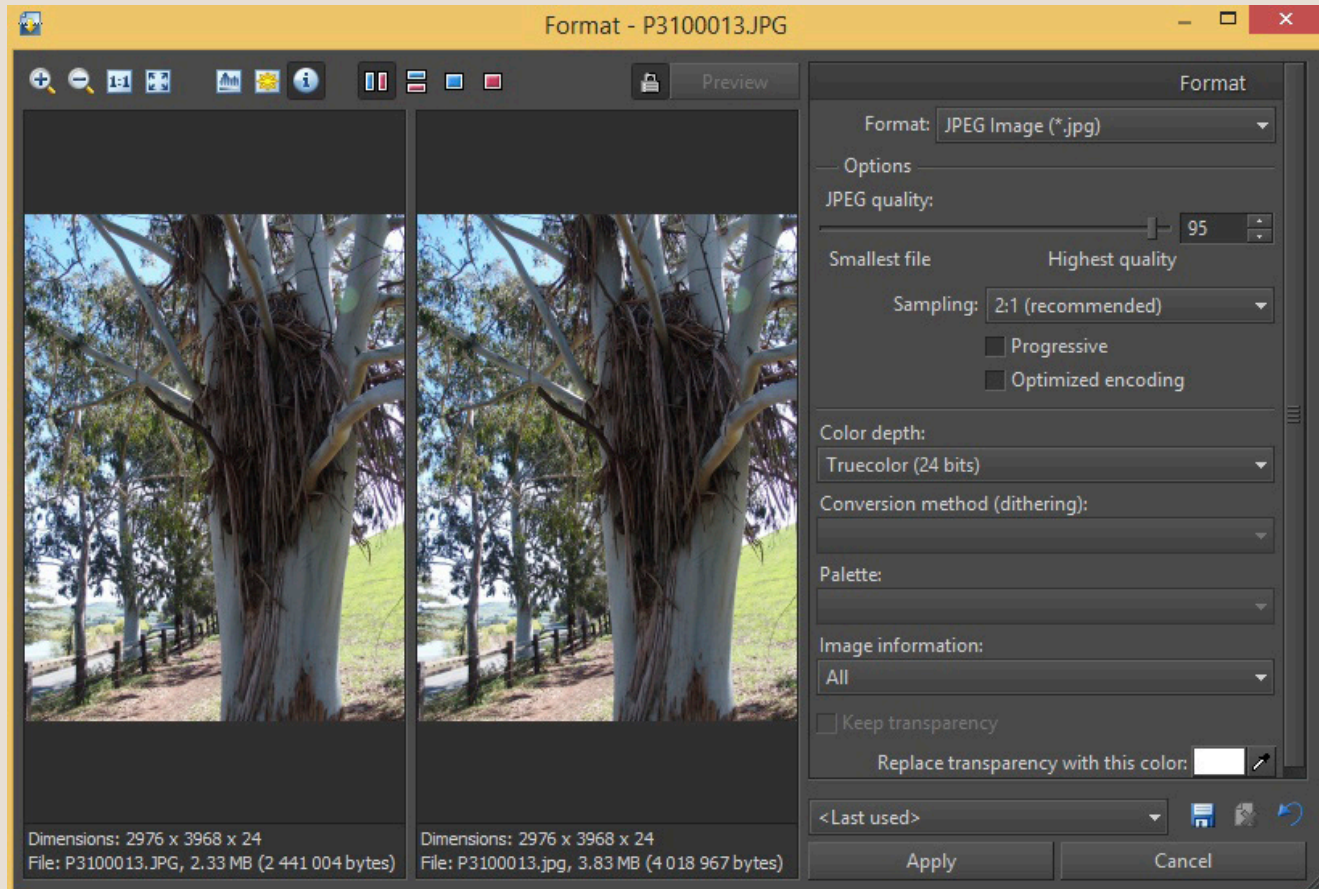
Photo software offers many quality levels when saving a file as a JPEG; cameras usually offer just three (from best to worst quality): Fine, Normal, and Basic.

Zoner Photo Studio lets you save JPEGs with quality on a scale from 1 to 100. When saving pictures for archival or later printing, use the full 100. When they will only be used on a web gallery, feel free to go down to 80-85. Most of your audience won't notice the difference. And meanwhile they'll only take up a third as much space as at 100.
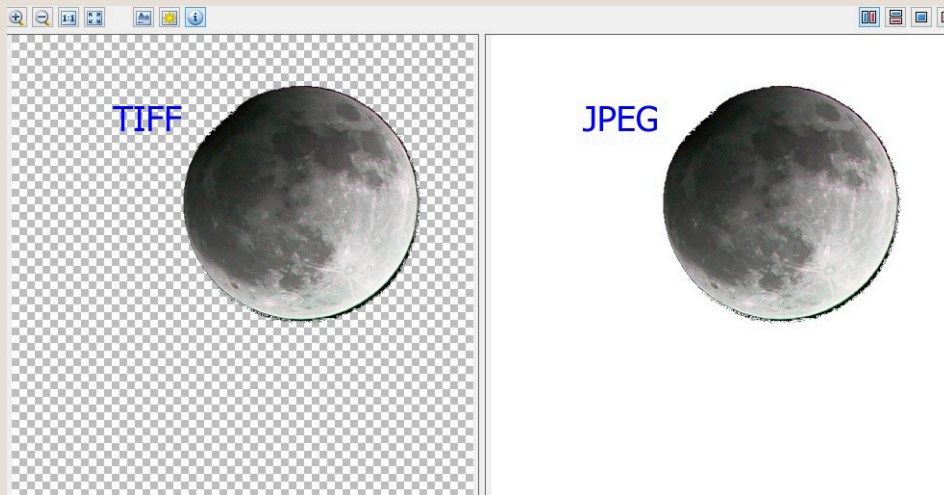
TIFF differs from JPEG in several aspects. The most interesting for us is that it supports transparency (truly "blank" areas).

If you're going to be saving a JPEG at less than full quality, save that as a copy—not over the original. Always keep an archive of original, full-resolution, full-quality JPEGs (or RAW files). You never know when you may want to e.g. print them.

The TIFF Format

As mentioned above, JPEG pictures are lossy—they lose at least a little quality each time you save them. So if you know you will be saving, opening, and resaving a the Zoner Editor, save your work to TIFF instead.

The TIFF (or TIF) format typically uses "lossless" compression—it always saves an exact, full-quality copy of the picture. The price for this is larger file sizes than for JPEG files.

TIFF is also useful for things like product photos, where you'll be wanting to give the photographed product a transparent background so you can paste it into an advertisement. Unlike JPEG, **TIFF supports transparency**.

Should I Shoot to RAW?

RAW: Yes Or No? This is a question faced by everyone who owns a camera that supports this special photo format. In this chapter we'll describe RAW and its advantages and disadvantages.

DSLRs and high-end compacts can produce RAW files. Their point is to provide "raw" data. Shooting to RAW means getting pictures in a pure and uncompressed form.

This has its disadvantages. RAW files are large, and they also can't be used for printing, web galleries, etc. directly. They must be "developed" to another file format first. But due to the many advantages of RAW, most professional and semi-professional photographers shoot to it, and advanced photo software like the Pro Edition of Zoner lets you work with RAW.

A piece of advice before we go on: If you don't have space problems on your memory card and you're willing to invest time in getting the best colors, shoot to RAW and take advantage of its possibilities.

DYNAMIC RANGE

"Dynamic range" means the difference between the lightest and darkest part of a photographed scene, or more precisely, a camera's ability to express that difference. For example when we're photographing the sky on a sunny day, we can see with our eyes what's happening in the shadows. But our camera's sensor has less dynamic range, so it has trouble handling both the bright sky and the objects in the shade.
If we make it properly expose the shaded part of the scene, the sky becomes largely a detailless white—it suffers "blowout." If we properly expose the sky, then while we get nice, detailed clouds up there, the shaded area all compresses and flows together into detailless black. By shooting to RAW, we gain the option to use digital editing to gain more dynamic range, and thus get more out of the shadows and lights in the photo.

The RAW format can "salvage a photo from the trash," and also turn a mediocre picture into a compelling one. It's most attractive in the following situations:

■ **A complex lighting situation with a high dynamic range**—we want to preserve details in both the lights and the shadows, but the scene would normally prevent that: it's too light in some parts and too dark in others.

■ **A poorly exposed photo**—a bit like the previous case, but here we are "salvaging" the photo. Here, RAW lets us extract extra detail in the endangered parts of a too-dark or too-light photo.

■ **Badly set white balance**—when shooting to JPEG, we have to be careful with white balance settings (we'll talk more about this in the color temperature chapter). In RAW, this worry mostly disappears.

■ **Pictures with strong noise**—when the ISO has been set too high on the camera, ugly colored stains appear on the picture: "digital noise." Zoner can reduce this a problem a little in JPEGs—or a lot in RAW files.

■ **HDR photography**—HDR, "high dynamic range," works best when we have the most color information possible to work with. To get enough information for this from JPEG, you need multiple source shots. For RAW, one is enough.

■ **Portrait retouching**—the last major area where RAW shines is portraits or any other photo on which we want to do complicated retouching. Here RAW gives us more post-production freedom.

As you can see, RAW is useful in many situations. Its main disadvantage is the file size of each picture—many times larger than JPEG. If you don't plan to spend time editing your pictures on a computer, if you only take pictures to capture the moment, or if you're short on card space or disk space, use JPEG instead to save space and time.

What Is Metadata?

Every digital picture file includes, besides the picture itself, information that describes it in some way. Such information is called "metadata," which means "data about data." Zoner Photo Studio lets you make use of metadata in many ways.
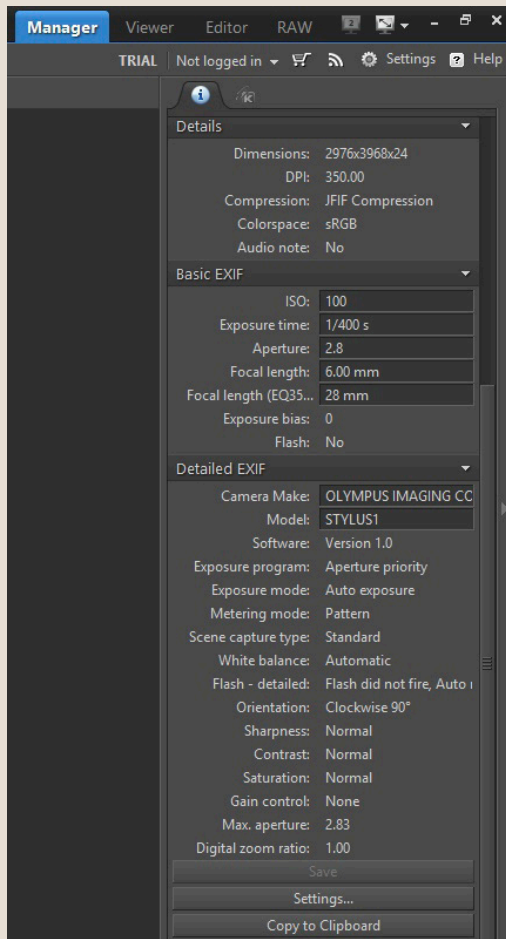
Picture information, on display in the Information Pane on the right side of the Manager.

You may have already heard the term "EXIF" (Exchangeable Image File Format). This, the most common metadata format, can provide a wealth of information on each picture and its origin. Even pictures straight out of the camera have metadata: their time and date, the camera and lens used, the exposure, etc.

EXIF is very useful because, instead of photographers having to write down pictures' technical data, that data is there automatically.

When working with Zoner Photo Studio, you will work with EXIF and other metadata very often, especially when organizing and searching for pictures. EXIF is just one metadata format. Some information is stored in other formats, and the RAW format stores metadata without using EXIF at all. But for simplicity's sake, we'll be pretending here that EXIF and metadata are synonyms.

We'll cover the details of metadata work in other chapters where relevant (in the chapters on using ratings for preliminary sorting, on correcting bad dates, on colored labels, on tag-based organizing and on describing photos' stories in metadata). Here our subject is more basic: why metadata?

One advantage of metadata is that it travels inside photos themselves, so it can't easily be destroyed by mistakes you make in Windows. Also, every modern photo processing application can work with metadata.

Thus you should always express pictures' information via EXIF—not file names, not folder names, not information formats tied to just one program.

And definitely not by "painting" the information onto the pictures themselves!

Once your key photo information is stored in EXIF, you can look it up later, even if the photo is in another program. You can use EXIF to sort photos (typically by date taken), analyze them (e.g. see what lens you use the most), sign them (using the Author and Copyright fields), write and forever painlessly reuse a description (for example in the Zonerama galleries), and more.

For our purposes it's enough to know that metadata, or more precisely EXIF, is photo information stored inside photo files themselves, and that you should try as hard as you can to benefit from its advantages—mainly from the fact that EXIF keeps working when you move your photos and is recognized by every modern program, which is especially useful when you need to use special, separate software (e.g. specialized noise removers) without losing your metadata.

The Catalog

The Catalog in Zoner Photo Studio is a major aid in organizing and working with photos. It is a database in which Zoner automatically stores each photo's metadata. It doesn't depend on the photos' actual location in your folders. Since it's a database, work with the Catalog and its information is quick and easy.
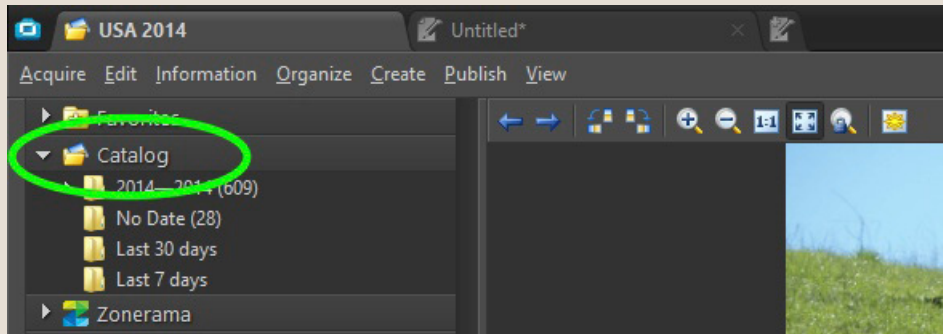
Information about a photo is automatically recorded in the Catalog whenever you browse the folder containing it. Unless, of course, you have turned off the Catalog in the Preferences. You can also use the Preferences to change where the Catalog is stored. And you can tell the program not to catalog certain folders. Several folders start out marked that way. These are Windows system folders full of non-photo pictures.

You can also tell the Catalog to only catalog pictures from specific folders. This is useful if you have carefully ensured that all your photos are in one place, e.g. on disk D:\ or in a folder named Photos.

If you set some folders as both "do catalog" and "don't catalog," then "do catalog" wins out. For example, if you exclude all of disk D:\ from the Catalog, but mark D:\PhotoArchive\ for cataloging, then PhotoArchive will be cataloged, unlike the rest of disk D:\.

The Manager's Navigator area offers a Catalog view. This view lists photos by the date they were taken. Pictures whose EXIF information doesn't contain this date get listed under No Date. Browser listings from Catalog view behave like any other Browser listings. So even though your pictures are shown in an unusual order and without their folder structure, you can still freely tag them, edit them, etc. Changing photos from Catalog view changes them for real!

Catalog view supports photo filtering, searching, sorting, and display just like any other view in the Navigator.

Catalog view is especially useful together with **Quick Search** (Ctrl+F). Use Quick Search and your choice of parameters to filter the Catalog listing down to what interests you. Filtered Catalog listings can also be added to Favorites, so that you always have them right at hand. Searching is covered in detail in a separate chapter.

If you use Zoner Photo Studio on the same computer for a long time, it can be useful to erase the Catalog and let Zoner create it again as you browse. That's because the Catalog contains items even for pictures you've deleted. Thus erasing/rebuilding trims it down to photos that actually exist. Use Settings-Preferences-Catalog for this.

Organizing Photos into Folders

When I first bought my camera and headed out to hunt pictures, I didn't give a thought to how I'd store them. I came back, spilled them into "a folder somewhere," named, say, "Disney vacation" one time and "Nature" the next. Sometimes I copied into both folders at once. It wasn't long until it was impossible to orient myself in this mess and find a given photo.

We suggest organizing photos into folders **based on the event where they were taken**. It doesn't matter if that event was a five-photo day trip or a week-long vacation that yielded several hundred photos. As with any photo organizing plan, the goal here is consistency and sustainability.

Name folders **by date and by the event name or location**. Putting the date first ensures that folders are always listed by date. The event name at the end helps you visually find your folders.

If you have lots of albums or are a control freak, you can create a more complicated date-based folder structure, but usually that just makes it harder to navigate your folders.

If you often work with photos from multiple authors, it can be good to auto-insert authors' names at the ends of file names.

Use **separate folders for copies and originals**. This prevents confusingly-located duplicates.

■ **Have one photo archive**. Just one. This may sound obvious, but often people don't do this. There's nothing worse than having to seek a photo in five different places.

■ **Auto-name your originals** by their dates and time taken. Separate your copies/variants from your originals by folder, not name, or at least vary only the ends of their names. This both avoids filename conflicts (two files with the same name in one folder) and makes it easy to find the original behind each copy.

■ To group pictures together across events, don't copy them into multiple folders. **Use keywords, labels, etc**. instead, or GPS-tag them. Always avoid needless duplicates!

■ Your photo archive structure was born to serve you. You weren't born to serve your photo archive structure. Use what you yourself need. For example, you may want a three-part structure. A "Projects" folder for pictures that don't need to be ordered by date. A "Travel" folder for date-ordered travel photos. And a "Family And Friends" folder for date-ordered "souvenir" photos that you don't plan to process further or publish, and that may not even be by you.

Again, your photo archive structure is about you and your needs. Another example—as a pro photographer you'll need a different, more complex system than someone who archives photos just for personal use. But no matter what, your organizing system should respect the goals of minimizing duplicates and staying readable in the long term.

Backing Up Your Photos

Photos are among the most valuable data on a computer. They're the results of hours of your work, you're emotionally connected to them, and they're irreplaceable. So always keep them safe: back them up! Here are some key photo backup principles.

Keep your photos organized—if your photos are scattered all over your hard disk, backing them up will be difficult.

Make backups frequently—making backups may be boring, but the longer between backups, the more unprotected photos, and the greater the risk.

Back up to an external disk—in terms of price/performance (backup speed and space), there's no better way to back up photos. If your photo archive is exceptionally large, you may consider a network disk. An important warning—never pull the USB cable out while copying to an external disk! This can destroy the entire backup.

Don't keep your backup on the same disk as your photos—the point of backups is minimizing risks; the biggest risk is disk failure. But don't forget the risks of burglary and acts of God. Ideally, backups should be in physically separate places too.

Consider online solutions—backing photos up on the Internet. *Zonerama*, for example, offers unlimited storage for JPEG photos, making it ideal for backup. But for RAW photos, you'll need a different service—perhaps Dropbox.

Don't underestimate backups, make them regularly, and use available services and tools, including Zoner itself. (This is covered in detail in a separate chapter.)

How to
Manage Your Photos

Sorting Pictures by Rating

"We all generally spend more time on sorting photos than on editing them. Sorting through hundreds of photos to pick out a few keepers for editing and presentation is unexciting work, but necessary. So it's good to speed it up. And the key to that is a clear, simple system."

The first step in sorting photos is to get rid of the bad ones. Logically that leaves you with only photos that you judge to have at least something going for them. But soon you learn that not even this category is the end of the line. And the key to sorting the remaining photos is rating them. To rate pictures efficiently, start by going to the **Manager** and switching to **Preview mode**. This mode is useful for rating pictures, since it shows them at full size.

What's a good rating system?

There's no One True Way for ratings, just better and worse ways. Creating the perfect system for you will take time and patience.
But the criteria below can be a foundation and inspiration. Many professional photographers around the world use similar systems.

0 – a not-yet-rated photo (this the default rating)

1 – a technically flawed, failed photo, on the road to the trash

2 – a technically satisfactory but uninteresting photo, to be used only if it's a necessity

3 – a photo that's somehow interesting that you can, or want to, show when presenting its parent album

4 – an exceptional album photo relative to the album it's in, one to definitely show when presenting its album

5 – an exceptional photo relative to your whole photo collection, one to show when presenting your best pictures

1 Because we want to work efficiently, let's forget the mouse for a while and use shortcuts instead. Use the left and right arrow keys to move among photos. To rate photos, use Ctrl + Shift + 9, 1, 2, 3, 4, and 5.

Tip: Instead of dwelling on each photo, it's better to go through all of them multiple times, so you can go back to the tough calls with a fresh viewpoint.

2 To compare a group of photos easily, first select them all at once. Do this by selecting one, then holding down Shift while pressing the left or right arrow key. To select photos that aren't next to each other in the order, hold down Ctrl and clicking each photo. Note that the Manager's Compare mode can show up to four photos at once.

3 To compare photos' fine details, like sharpness or the expressions on peoples' faces, use 100% zoom (Num *). Note how the mouse cursor changes when it's over a zoomed-in photograph. The hand cursor means you can click and drag to pan the picture (i.e. to change which part fits on the screen). This is true even if you have multiple photos selected.

4 To quickly filter pictures after rating them, use the Quick Search box above the Filmstrip. Click it and it expands to show controls for many things, including ratings. With the above-mentioned rating system, then, you would tell it to search for only photos rated 3+ for presentation, and only photos rated 4+ for editing. Pictures with a 1 rating, meanwhile, can immediately be deleted, all at once.

WHAT YOU'VE LEARNED:

- How to quickly browse imported photos
- How to systematically rate photos
- How to compare photos

Giving Photos Colored Labels

When I want to say something about a picture forever, I add a rating or a keyword. When I just want to say something about it right now, I add a label. Labels mark my photos' statuses.

Besides photo ratings and descriptions, Zoner Photo Studio lets you mark photos with labels in one of 9 colors. While ratings are generally used to sort photos by quality, and keywords to describe and categorize photos, colored labels usually serve to mark a photo's status.

Here's a four-color system you can try:

- **Red**   this photo hasn't been edited, and needs to be edited
- **Yellow** this photo has seen basic edits, but it needs more editing
- **Green**   this photo has been edited and is ready
- **Blue**   this photo has been published on Zonerama
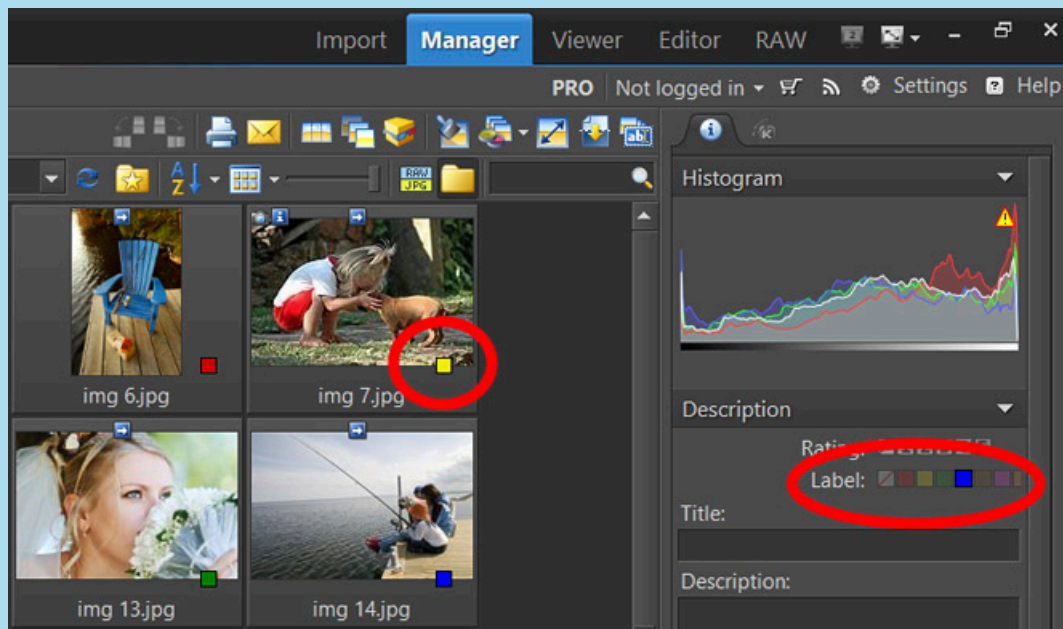
But it's actually up to you which role you give to which color, and how you integrate them into your organizing workflow. Note: each photo can only have one label. You can search for photos by label. You can also search by a combination of label and something else. For example, you can search for red-labeled photos with the keyword Luke.
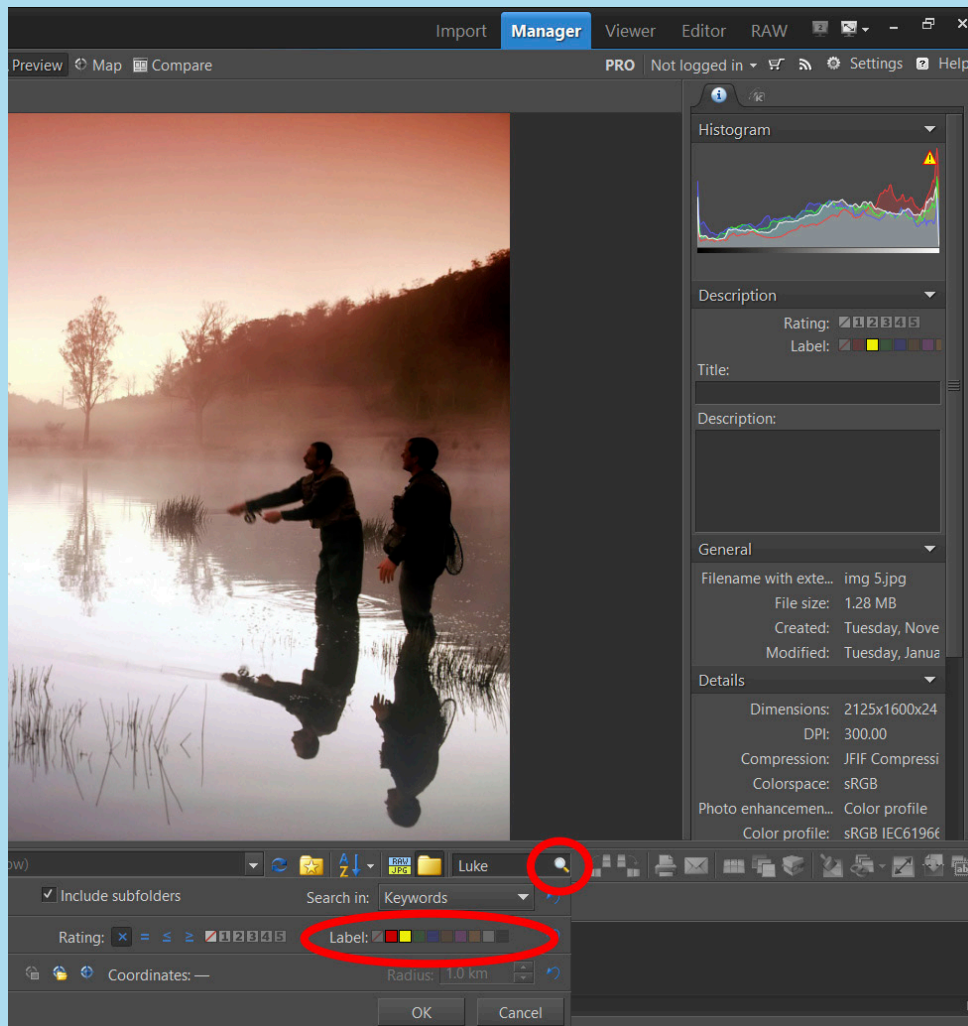
Use **Settings-Preferences-Labels** to rename the different colors. This has two benefits. First, it helps you find your way around your own labels. Second, it's shown in some other software, so it may help others find their way around your photos as well!
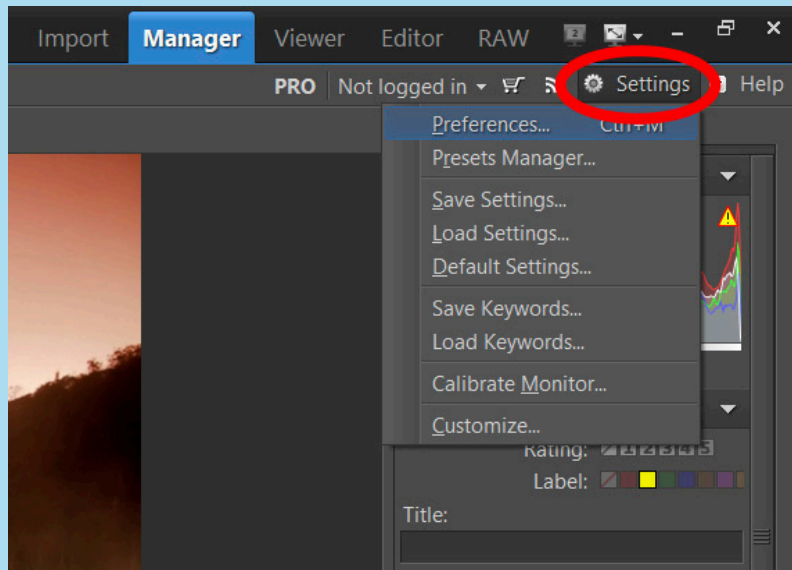
Get Your Photos Organized—Use Keywords!

FEATURES USED: Keywords, Image Information, Batch Edit EXIF

I have lots of photos, and it would be hard to navigate them all or find a particular one by hand. Fortunately, I've learned to use keywords in Zoner Photo Studio to find any photo I want quickly and easily.

Keywords are also sometimes called tags. They are a specific part of a picture's EXIF information. Their greatest advantage is that any photo program will recognize them, as well as many web galleries. You add proper keywords once, and you never have to worry about them again.

1 Before you start tagging, think about the system you will use for your tags. They should each describe a photo, or a detail connected with it.

If you don't work with GPS data, then it's good to keyword-tag your photos' locations. If you take product photos, keyword-tag them to indicate their brand, category, and the like. It's also very common to tag the people in shown in photos, so that you can later filter by e.g. all the photos with dad and grandma.

It's simpler to think up keywords in advance and then assign them, although sometimes it takes the actual tagging to get the inspiration for the tags.

2 Now let's look at tagging itself. Open a folder or album in the **Manager**. Show it in the **Browser**. Ideally this will be a folder with photos that you have just finished importing and rating. Now click on the **Keywords** tab of the **Information Panel**—the area on the right side of the Manager. Alternatively, press Shift+K.
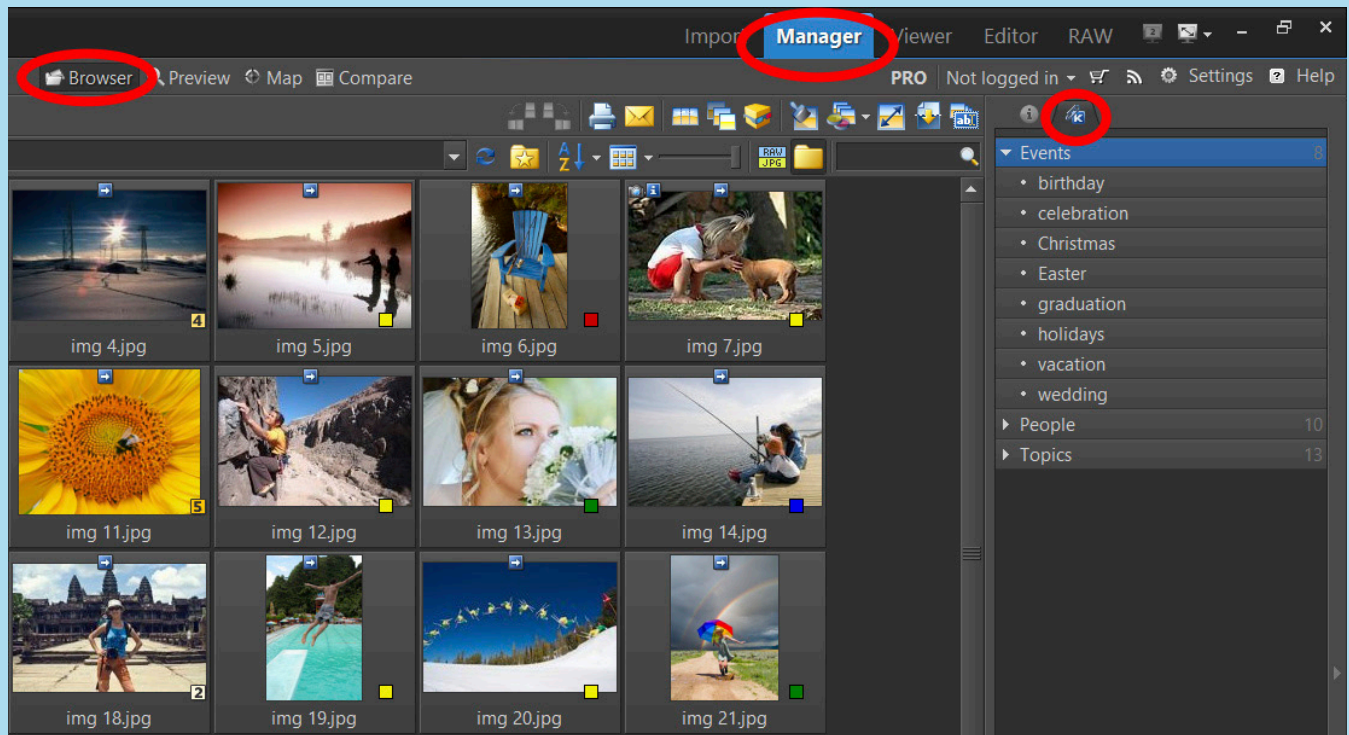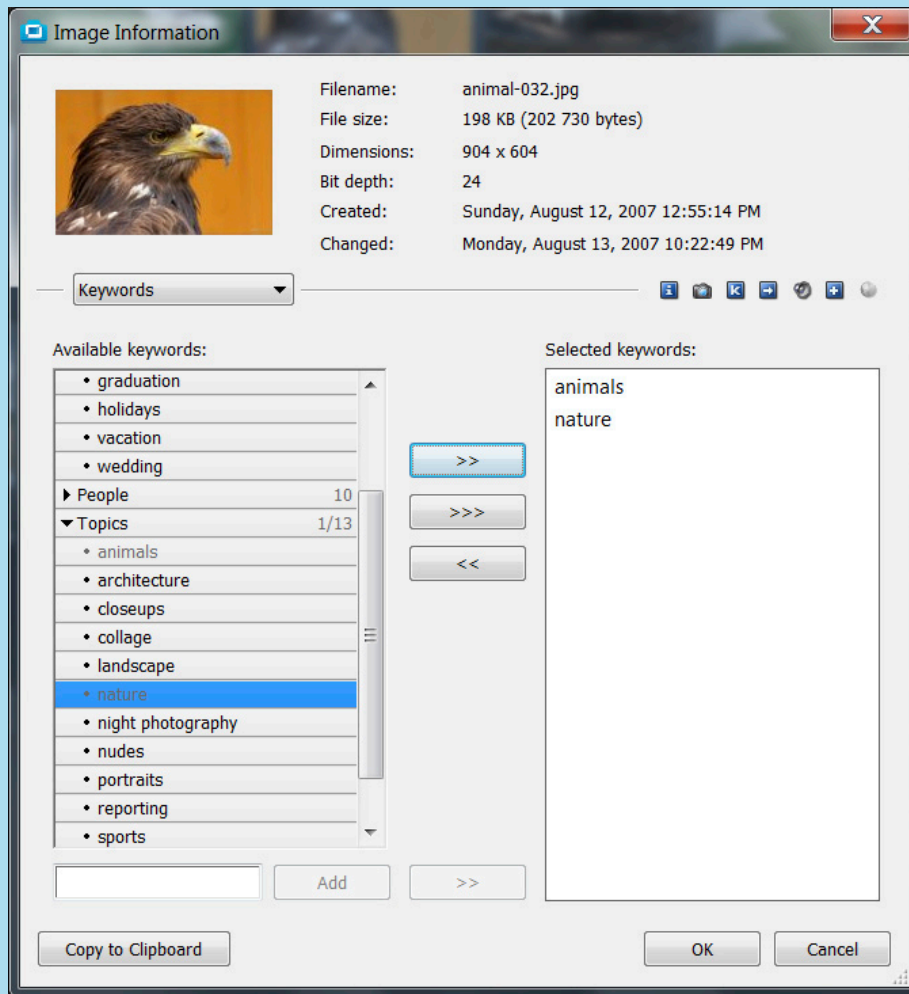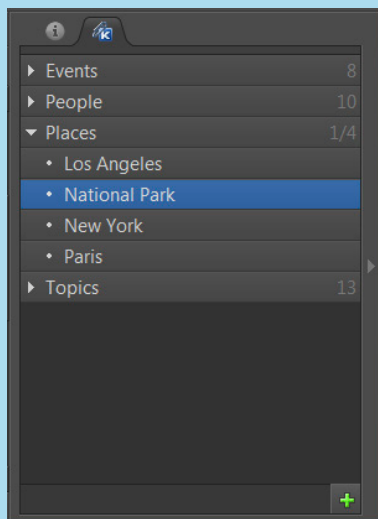
3 You can also create your own categories for easier navigation of keywords. To create new keywords, right-click in the **Keywords Panel**. Add a description of the keywords as you add them if you wish, to keep from forgetting what they mean. In our example, we've created a Place category, and within it, the keywords Los Angeles, National Park, New York, and Paris.

Now we can assign these keywords to photos by dragging and dropping the keywords onto them. To add the same keyword to more than one photo, select all of those photos, right-click on the keyword, and use Assign Keyword to Selection.
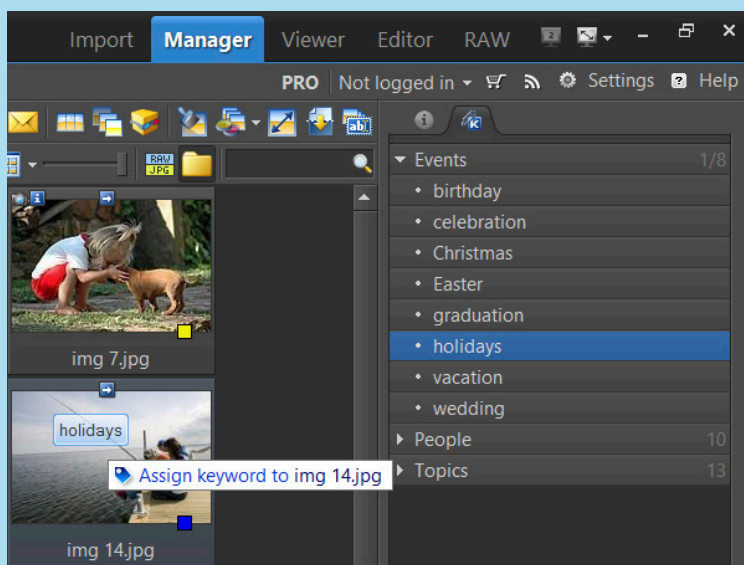
4 In the Browser's normal view (Thumbnails), photos with keywords have a **"K" icon** on their thumbnails. Hover the mouse over that icon to show a photo's tags. Double-click the icon to see the **Image Information** windows. This window can also be used to tag photos, but only one at a time.

When adding the same tag to many photos at once, drag and drop stops being convenient. In these cases, use the **Batch Edit EXIF** window instead.

Making Pictures Tell a Story

FEATURES USED: Descriptions Panel, Image Information, Batch Edit EXIF

Ratings, colored labels, and keywords are great ways to organize a photo collection, but my most important photos have a story that can't be reduced to just a few words. I want this story to travel with the photo. That's what photo Descriptions are for.

1 A description is nothing more than a text stored inside a photo's metadata. Just like keywords, it is powerful because it is universal. Every modern photo program understands it, as do many web services. Zoner
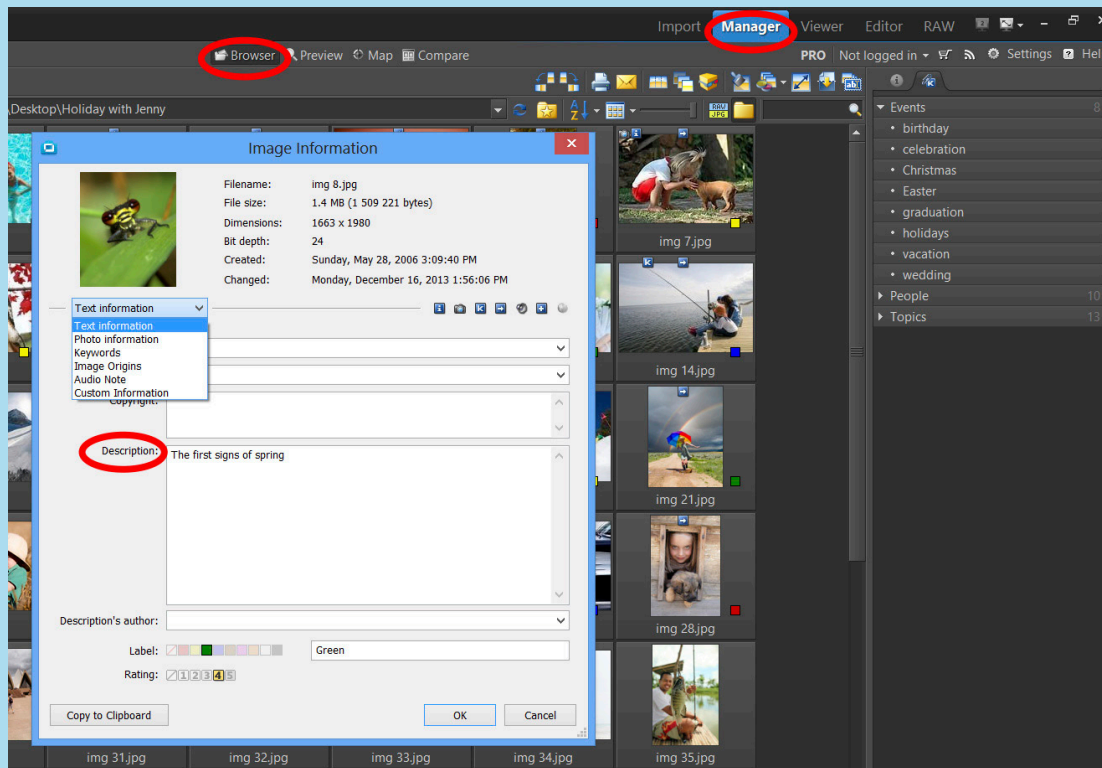

The Image Information window is one way to add photo descriptions, though not the best way.

offers several ways to describe a photo. The Image Information window (Shift+Enter) is one. However, use the **Descriptions Panel** instead, as it is simpler to use. To reach it in the **Manager**, use the Information menu. To reach it in the **Viewer**, use the **View menu**.

2 Don't describe absolutely all your photos—just the ones that are worth it. Adding descriptions takes a lot of work, so to save time, do it just for the pictures that you have earmarked for publication. To get these all in one listing so you can describe them all at once, copy them to a single folder or use Quick Search. The Descriptions Pane is a quick way to fill in pictures' Description field, of course, as well as Title. It also offers Labels and Ratings. Only the most unusual and artistically valuable pictures deserve a Title in addition to a Description.

A third, but also not-best option: writing descriptions using the **Information Panel on the right in the Manager**.

3 Use Description for information worth keeping around, or alternatively for information that should automatically be shown with the picture on e.g. Zonerama. Camera information usually doesn't belong in a Description, as that info is automatically recorded in the **EXIF**. But if you want to pull it out of the EXIF and copy it into the Description for your audience's sake, you can do that using formatting strings (discussed elsewhere in this book).
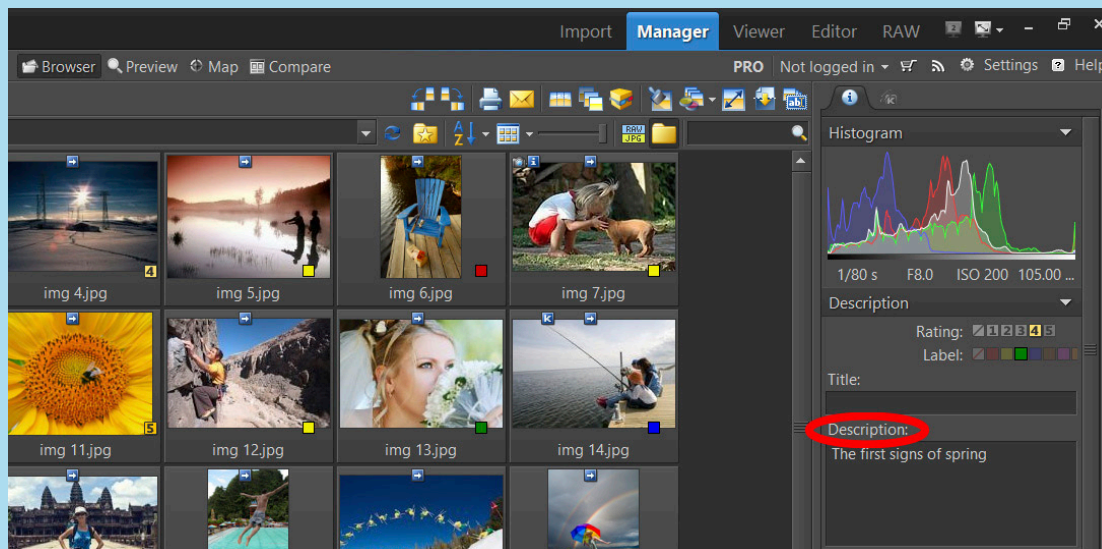
A typical description tells about the place and the event that form a picture's story. When writing a description, keep in mind that Zoner can search in descriptions, so the description will be exceptionally useful if it contains words that are not worth including in the picture's keywords, but still can help to identify it in a search. Note that searches in Zoner Photo Studio can automatically find different forms of a word than what you enter. (For example, "apples" when you ask for "apple.")

WHAT YOU'VE LEARNED:

- Modern photo descriptions are not normally a place for camera info
- Photo descriptions can be fed camera info using Formatting Strings
- Zoner Photo Studio can search in descriptions, and can even find different forms of a word

Working with GPS Coordinates

**FEATURES USED: Map, Search, Assign GPS Coordinates**

As recently as a few years back, I completely ignored the option of adding GPS data (longitude and latitude) to my photos. I thought it was nonsense—how would I ever forget where I took what picture? But my memory actually isn't perfect. Already I'm finding with some of my older photos that I wish I knew where exactly I'd taken them.

Zoner has been able to GPS-tag your photos for several versions now. But version 16 brings something new here: the **Manager's Map** mode. Switch to Map mode to make the main part of the Manager show a map (in the English version, a default map of the US), with the Filmstrip at the bottom.
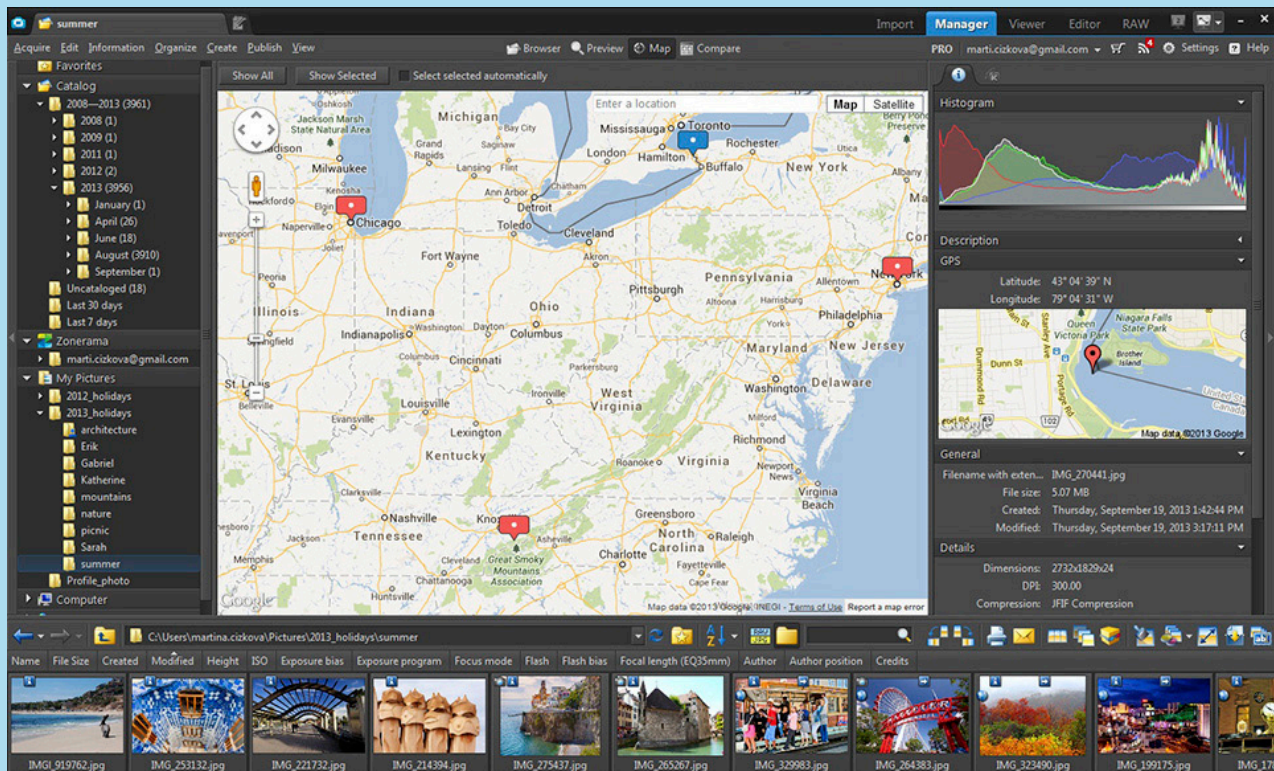
Add GPS Coordinates Using Maps

Assigning GPS coordinates to photos in this mode is very intuitive. Use the map's search box and zoom tools to zoom in on the map location where the photo was taken. Then click that photo on the Filmstrip and drag it to the place you want on the map. Zoner then GPS-tags the photo automatically.
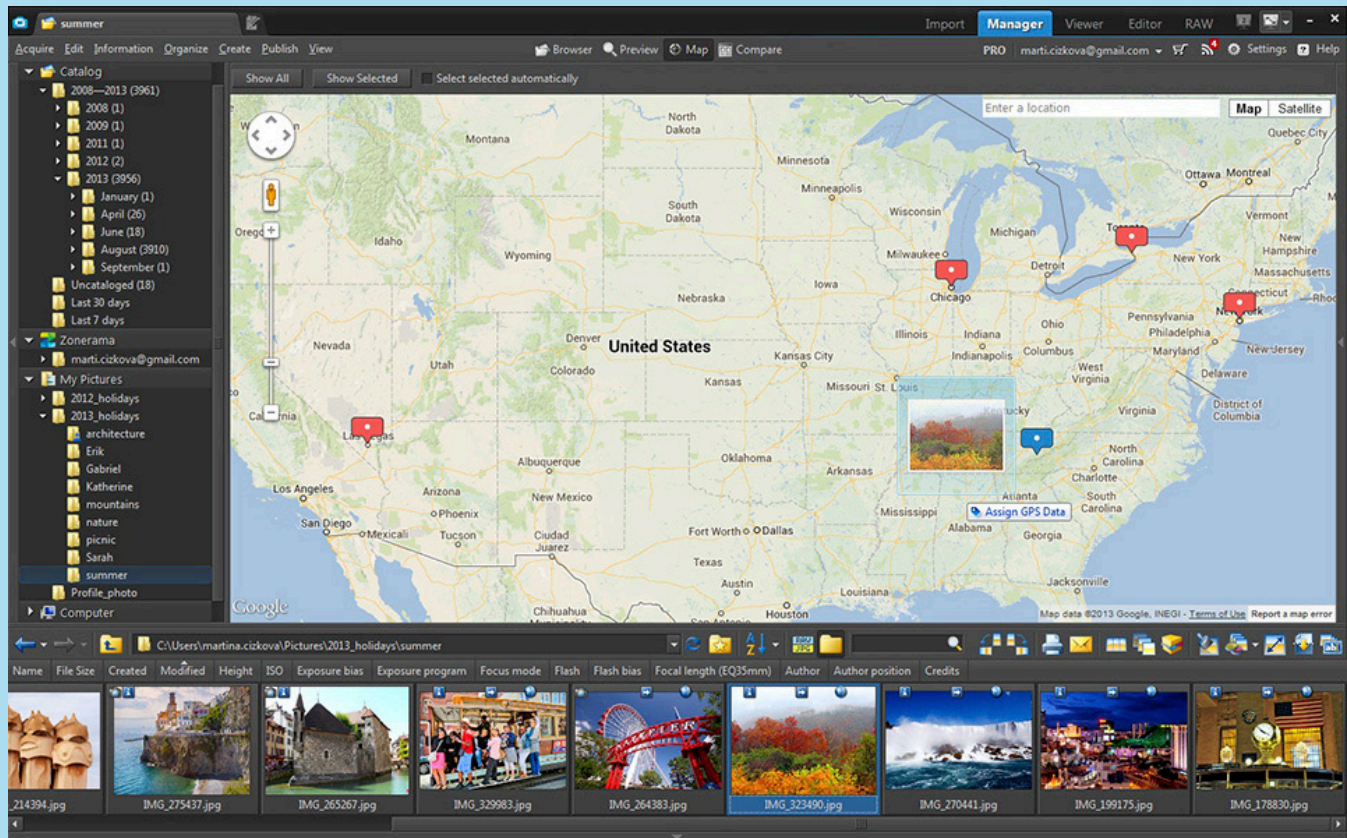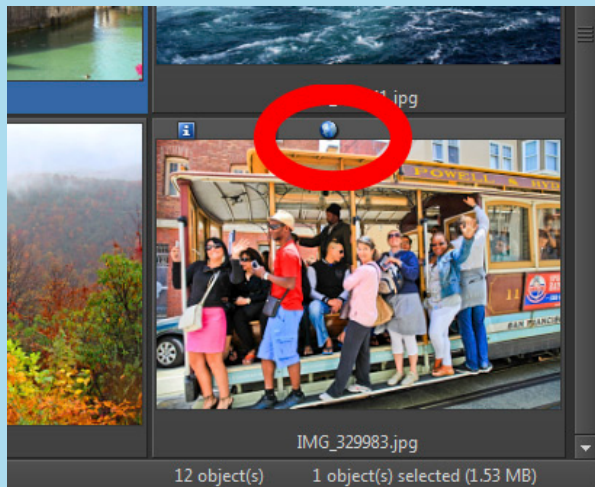
Manually Inserting GPS Coordinates

You can also manually insert GPS coordinates to a photo using Information-GPS-Assign GPS Data.

■ Identify GPS Tagged photo

The Manager's Browser mode displays GPS-tagged pictures differently from the rest. They have a small globe icon.

Group Photos by GPS Location

Later on when you need to find all photos taken near a particular place, use **Quick Search** (we'll talk about this in the chapter on searching for photos) or use the **Search** item in the **Organize** menu. In the Search window, switch to the **GPS** tab and checkmark it.

You can enter coordinates here by hand, or—even more conveniently—take them from an already-tagged file or use a map. Click **From Map**... and then click on a map location to find photos taken in its "neighborhood." Once you've chosen coordinates, click **OK** to confirm them, then adjust the size of the **Neighborhood** if needed. Here we used a value of 5 km (3.1 miles).
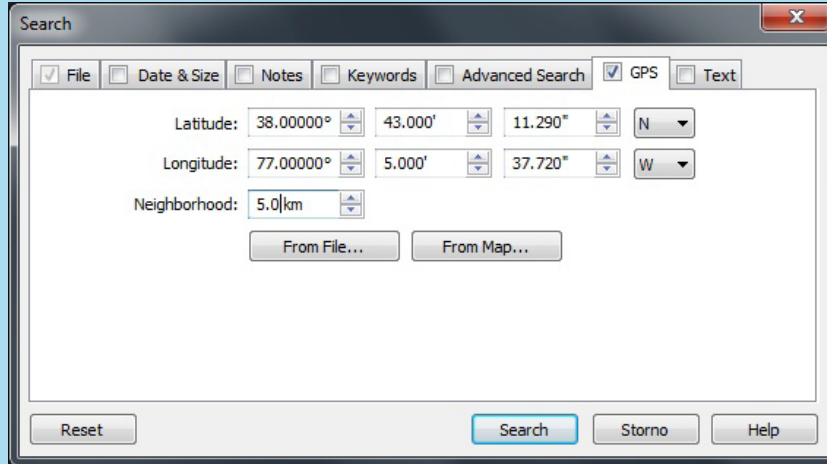
WHAT YOU'VE LEARNED:

- How to check if a photo is GPS-tagged
- How to add GPS coordinates to photos
- How to search for photos by using GPS coordinates

Fixing Bad Dates

Twice a year, the same annoying need: fixing the time on many or most of our clocks and devices. I don't know about you, but I always forget to change the time on my camera. Usually about a week after the time change I realize that all of my pictures have bad time stamps.

Leaving the battery out, letting a backup battery fail, or accidentally changing the settings will also put you in the same spot. That is, coming back from a shoot and learning for example that your photos were officially shot on January 1st, 1900. Fortunately there's a solution, and it doesn't involve laboriously editing pictures one by one.

1 Every photo you take has EXIF data, as well as a time stamp. Pictures' date-taken info is stored in the pictures themselves right they're saved on the card. Zoner Photo Studio always works with a picture's EXIF picture-taken date—no matter whether that date is right or wrong. Any searches by date for your photos that you do later on will not work right if your photos don't have the right dates. That's why it's always good to have the time and date set correctly in your camera.

But if you have incorrect times or dates on photos you've already downloaded onto your computer, you can fix them in Zoner Photo Studio like this:

2 In the **Manager**, find the folder with the files whose date-taken info you want to fix. Now select the photos with bad date-taken info. In Image Information (Shift+Enter), check whether they have bad times, dates, or both.

You can also fix a picture right in this window's **Photo information** section. Both the date of file creation (**Created**) and the date of last changes (**Digitized**) can be changed here. The date of the last changes to the picture (**Modified**) cannot be edited. This information is set by Windows itself every time new data is written to a file.

3 Generally bad-date problems affect whole sets of photos, and fixing them photo-by-photo would be slow. Fortunately, in Zoner, you can fix dates in batch.

Select the files that you want to fix, or use Ctrl+A to select the whole album. After selecting the files, use **Batch Edit EXIF** (Ctrl+K). On the **Date and Time** tab, either use **Set picture-taken time and date** and set a certain date for all pictures directly, or use **Shift date** and then use **Corrected** to set the correct date. This shifts all the photos' dates by your chosen number of days. That way, even if you're correcting photos from a multi-day set, the date will be set right for all of them. This works for the time of day too—great for those Daylight Savings changes I mentioned above.

4 It's nice to have this option, but it's nicer not to have to use it. Before each major shoot, check your camera's time and date settings. Don't worry, it's not complicated! Take any picture and show it in your camera. Show the picture details—you can check the date there. That will save you the trouble of these computer edits. Be especially careful around the time of Daylight Savings changes, and when travelling between different time zones.

Tip: For instructions on setting the time and date in your camera, check the camera's manual.

WHAT YOU'VE LEARNED:

■ How to repair a photo's picture-taken time and date

■ How to batch-edit pictures' EXIF information

■ How to fix badly-set time (e.g. after Daylight Savings changes)

■ How to time-shift badly-set dates

Searching for Photos

My photo collection contains a huge number of pictures, and trying to browse my way to the right ones would be the death of me. Fortunately Zoner Photo Studio can quickly find any picture or pictures for me that I want, once it knows what to look for. Since I have my pictures well-tagged, finding the right one is easy.

1 There are two major ways to do a search in Zoner Photo Studio. The most common and elegant is "**Quick Search**." It works the same in both the Navigator's Catalog view and normal file browsing. In both situations, its keyboard shortcut is Ctrl+F. Quick Search is shown as a box on the right above the Browser in the Manager's Browser mode. In the other modes, it's on the right above the Filmstrip.
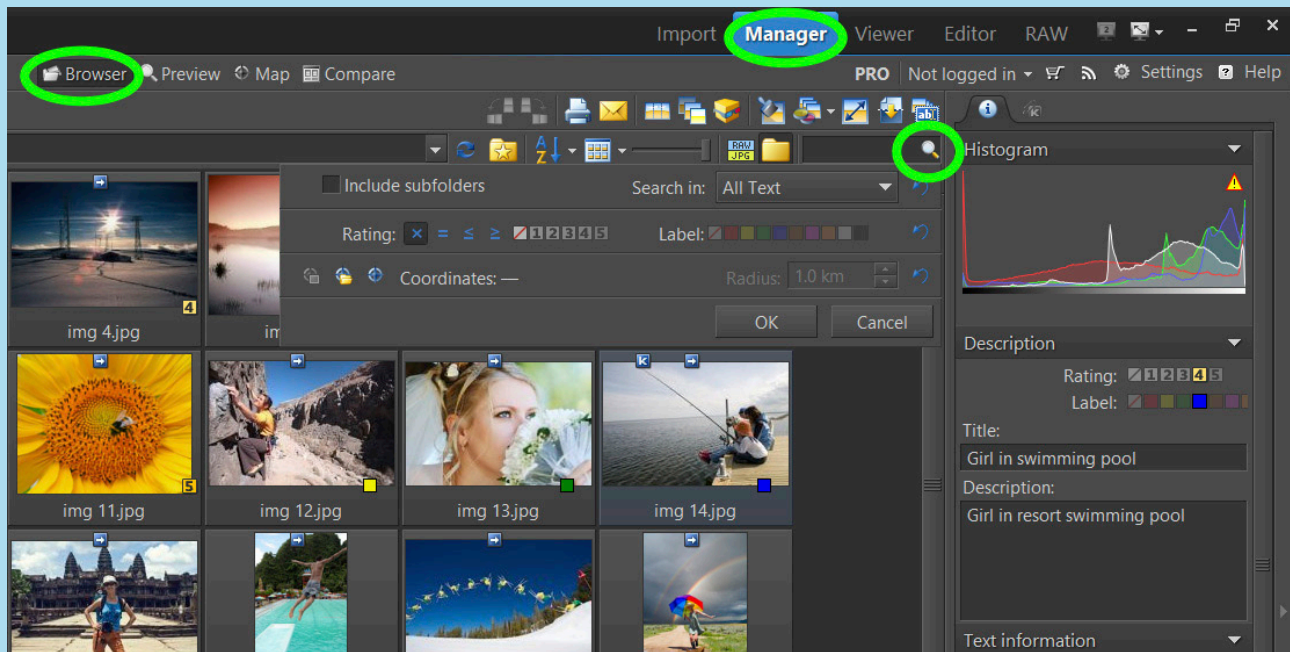
2 The settings for Quick Search are relatively simple. **There's a box for text searches**. It uses what's called "fulltext," which in practice mainly means you can e.g. search for "look" and find "looks" too. This box can only look in certain kinds of text information; it can't be used to search in the f-stop data for example, but only Title, Author, Description, Keywords, and Path (e.g. the name of its folder). You can use "logical operators" like AND and OR here. For more information about them, see the Help.

3 You can use Quick Search to **find photos in Zoner by their Rating**. To search by rating, first set whether you want to search by a certain rating or a range of them, and then set the rating number(s) involved. You can also filter by one or more colored labels. All the parameters in Quick Search are added together; for example, if you search for a red label and a rating of 5, then only photos meeting both criteria are found—the "red fives."

Quick Search normally only searches in the current folder. But when you use it while browsing disks (i.e. when you are in the Computer or Network part of the Navigator), there's an Include subfoldersoption. With this option active, Zoner searches in not only the current folder, but also the folders "below" it.

4 To search by a wider range of information than is offered by Quick Search, **go to the Manager, then the Organize menu, and use Search**, or the similar function named Filter. Both work similarly, but Search searches through every disk on your computer (though not on a local network), while Filter only filters the current folder or album (similar to Quick Search with or without the Include subfolders option).
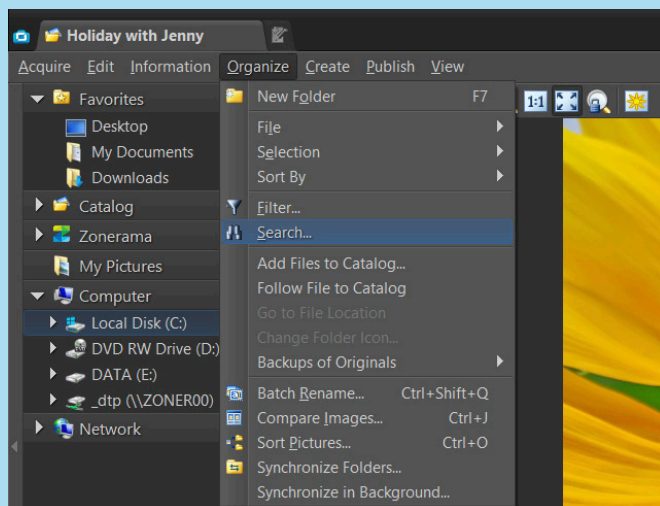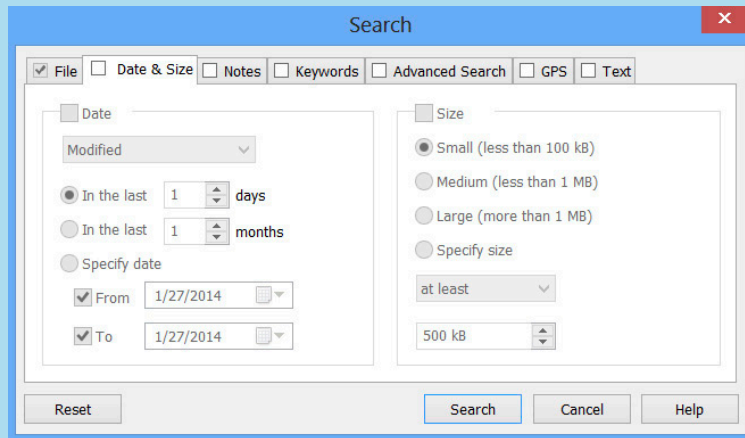
WHAT YOU'VE LEARNED:

■ Fulltext searching

■ How to use Quick Search

■ How to filter photos

■ The difference between Search and Filter

13 Killer Tips
for Editing Photos
in Zoner

Straightening and Cropping Photos

FEATURES USED: Crop (C), Align horizon (H), Crop Marks (TAB)

Picture straightening and cropping have to be about the most important photo edits that exist. They not only give my pictures a whole new dimension, but also give me a chance to practice one of the most fundamental photography skills: composition. In other words, each straightening and cropping job makes me a better photographer.

These two edits are the first ones you normally make. Later edits will typically involve exposure, and when you're changing exposure, you need to watch the histogram. And in an uncropped picture, that histogram will not be representative. (And meanwhile, after straightening a tilted picture, you need to crop it.)
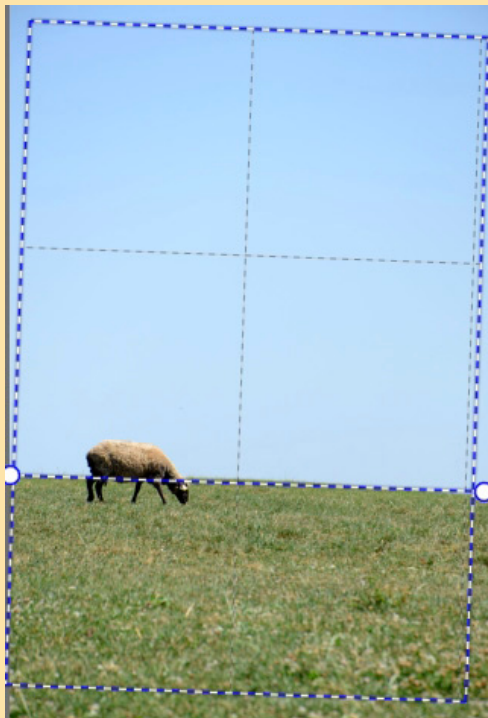
1 Let's start by **straightening the picture**, so we know where it will get autocropped before we do our real crop. The photo here is tilted a bit to the right. Select the Align Horizon tool (H). You use this tool by moving the two boxes on the dashed line to line it up against the horizon. To see a grid during your work, turn on the Grid option and click and drag the mouse cursor. The grid shows how the photo will be oriented after rotation and which parts will be cropped out.

2 Now let's take a look at **Crop** (C) itself. Typically you'll want to crop based on the ratio (e.g. 3:2 or 4:3) that you want for the final result. This especially applies for pictures that you'll show off on the web or send off for printing. Sometimes you are free to crop as you wish—in those cases, use Free Ratio.
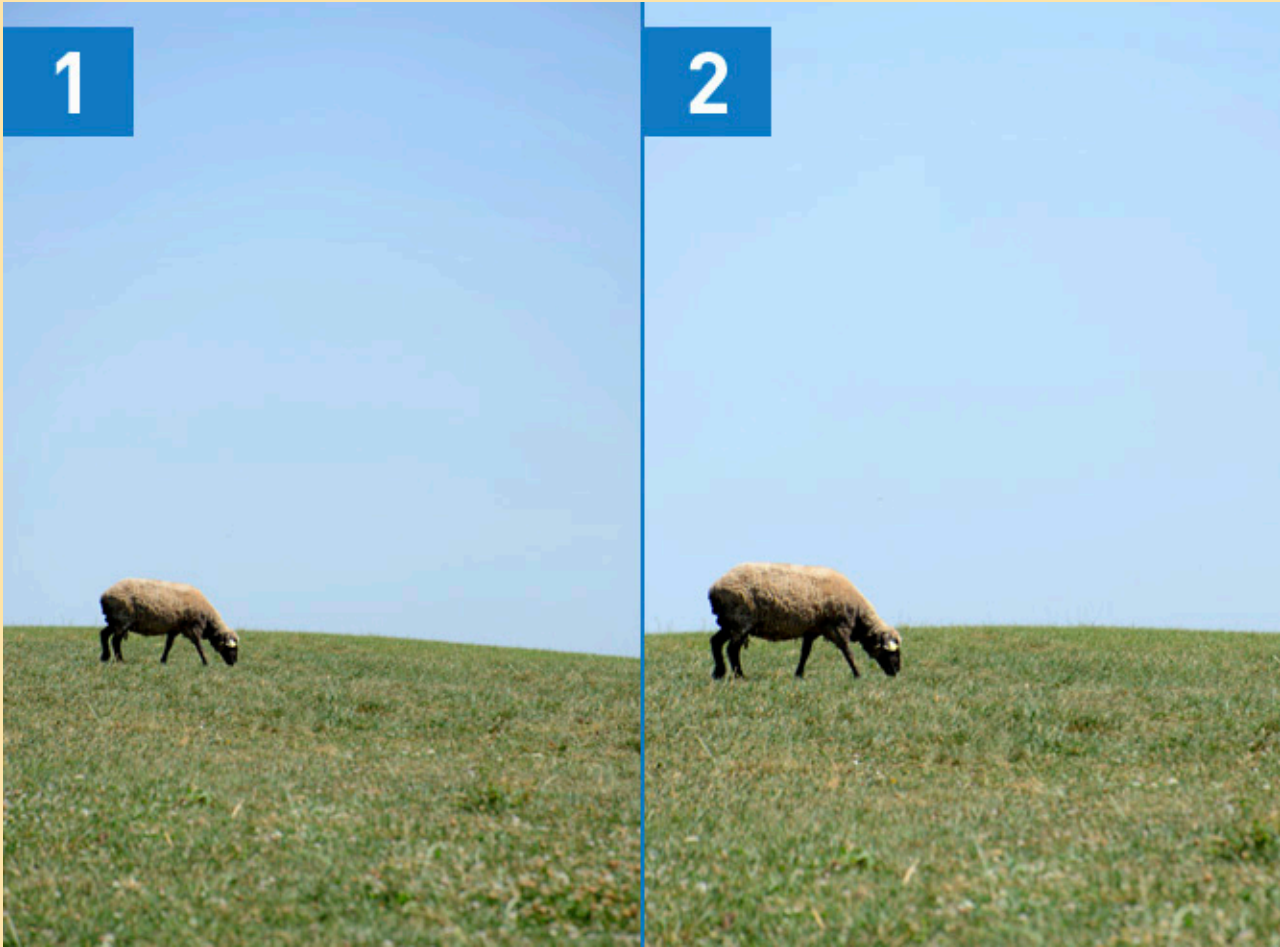
Composition Basics—The Golden Ratio

The most useful rules of thumb to keep in mind during composition are the Golden Ratio and its simplified sibling, the Rule of Thirds. In short, most photographs look better when their subjects are not right in the center, but instead closer to the corners. The same applies for any prominent horizontal or vertical lines, like horizons and skyscrapers.
Zoner can help you follow these rules of thumb, by showing Golden Ratio/Thirds crop marks during cropping. To show them, use the items in View - Crop Marks, or cycle through them using the Tab key.
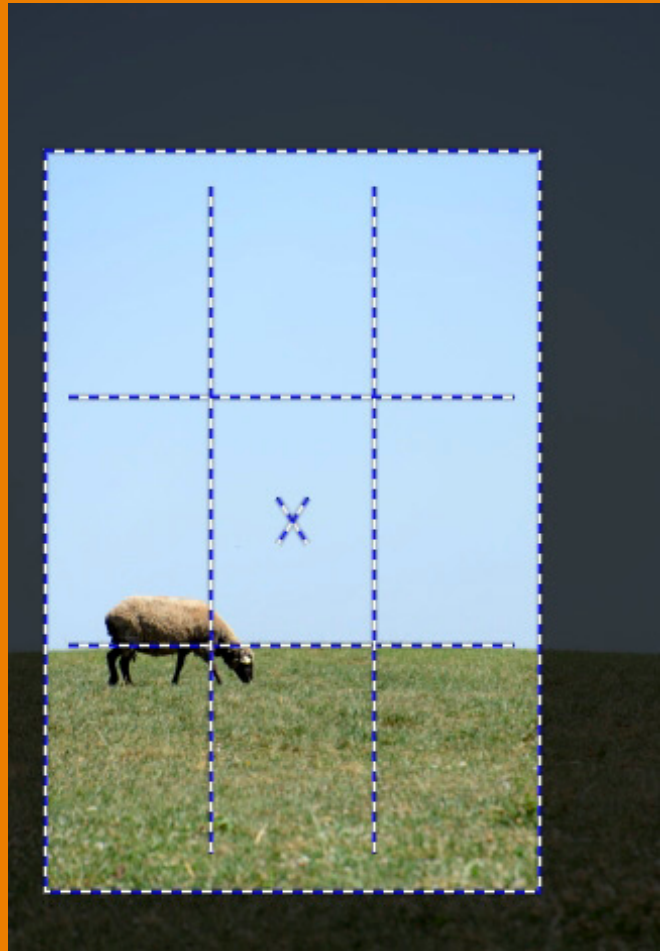
3 Cropping can improve composition and remove distractions near the edge of a picture. To **size the crop rectangle**, click and drag its corners. **To position it**, click in it and drag it. Click Apply when you're done. The illustration here shows just how strongly a crop can change the feel of a picture.

The photo before cropping (1), and two cropping variants (2, 3).

WHAT YOU'VE LEARNED:

- Why to straighten and crop as your first edits to a picture
- How to use the Grid to preview what you will lose to auto-cropping
- Why to use Golden Ratio composition
- How to see Golden Ratio crop marks during cropping

Fixing Simple Perspective Problems

*Although Zoner's **Align Horizon** is the feature I use most when fixing my architecture photos, **Collinearity** takes a healthy second place. That's because it can fix verticals in a photo that converge because they belong to a building photographed from below using a wide-angle lens. Buildings often look better in pictures when they're rectangular like our eyes expect.*

1 To fix this problem, use **Adjust Collinearity (K)** in the Editor's toolbox.
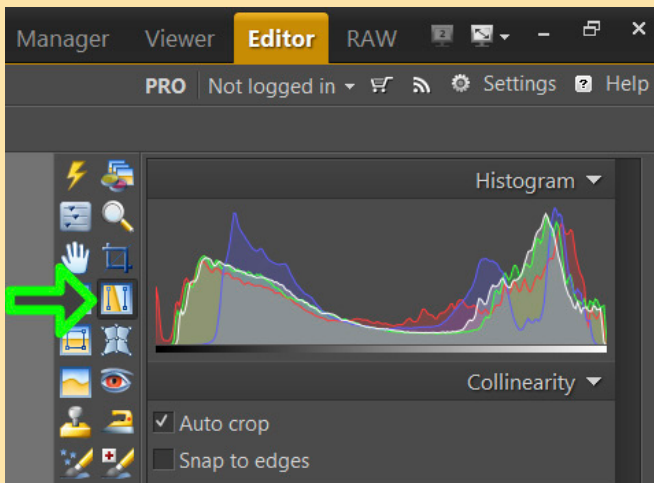
Two vertical lines appear. Click and drag the small squares on them to set their angle and position. Lay them along the lines of the object that you want to straighten. Then click **Apply**.

2 This correction slightly changes a picture's overall shape, making cropping a practical necessity, so it, too, does an **Auto-crop** by default. To crop manually, turn this option off and use the **Crop** tool (C).

3 Turn on **Snap to Contours** to position the two lines more easily—this makes the squares "jump" to contours in the picture. To turn this option on temporarily as you work, hold down the **Alt** key.

WHAT YOU'VE LEARNED:

■ What collinearity is

■ How to repair it

■ Why to crop after fixing it

■ Why the Snap to contours option is useful

Basic Exposure Fixes

FEATURES USED: Blowout highlighting, Quick Edits

Just about every photograph that I edit gets some exposure fixes, either because I had the camera settings wrong, or because I had them right and yet my pictures still feel a bit flat. The solution for both of these dates back to film photography, and Zoner makes it quick and simple.

Remember, a good exposure is one where neither the lightest nor the darkest parts of the picture have lost detail due to running into the "wall" of pure white or pure black. When they do run into that wall, you get blowout, e.g. a bright cloudy sky turning into one blob of pure white.

Blowout highlighting. There is some heavy red-channel blowout in the girls' faces.
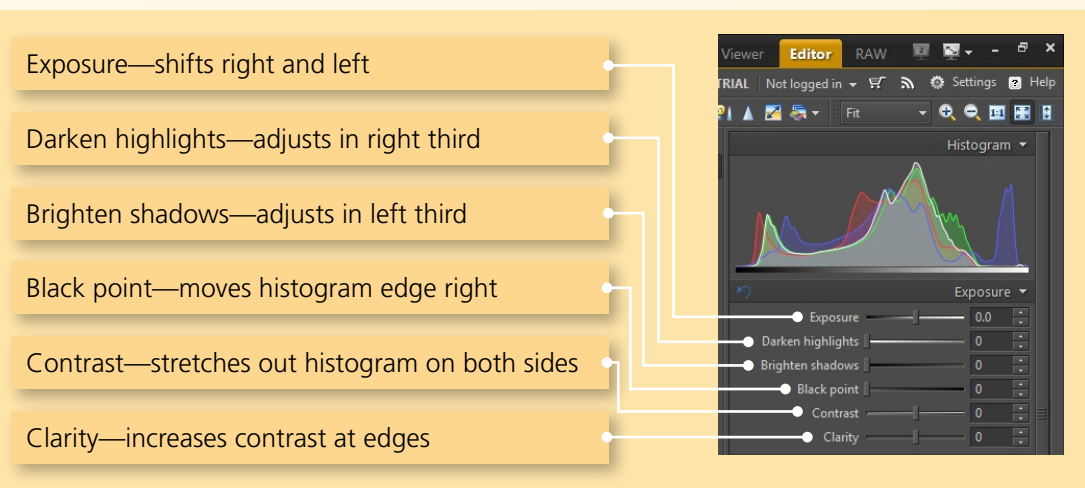
There are many written words out there about how to set up exposure and the in-camera factors behind it (shutter, aperture, and ISO). In short, it's fundamental for anyone who takes photography seriously, so when you do get it wrong in the camera, you need to at least fix it afterwards.

1 For our illustration, we'll use this picture, taken against the light. Due to bad exposure, it's too light and it feels vaguely like it's covered in a haze. Its histogram shows an exclamation point, indicating that it suffers from blowout. We could also learn this using in-picture highlighting: **View-Show Blowout** (Shift+O). When doing the edits that follow, we'll leave Show Blowout on nonstop.

As a quick first step, we go for the **Exposure** slider. It moves the whole histogram right or left (it brightens or darkens all the light tones). Our goal is to get as much information as we can into the photo's dynamic range—into its histogram.

For this picture, we'll move **Exposure** down until the blowout warning disappears. (Note.: In this case, we're only masking the problem. When a picture has blowout, the color information from the affected areas can never actually be recovered, except in some cases for pictures in RAW format.)

When we plan to work with the Curves or Levels tools, we use **Exposure** to move the histogram towards the middle. But here we're in a hurry, so we instead keep the light tones running up to the edge of the histogram, so we'll be able to make do with just what's in **Quick Edits**. Now our color information is readied for further work, and we turn off blowout display.

Exposure—shifts right and left
Darken highlights—adjusts in right third
Brighten shadows—adjusts in left third
Black point—moves histogram edge right
Contrast—stretches out histogram on both sides
Clarity—increases contrast at edges

2 The photo is better off now, but it still looks like it was taken through glass. It's short on contrast—on any real difference between light and dark. Normally, we'd use the **Contrast** slider to fix this, but here it would be a mistake. **Contrast** would push the histogram to the sides, giving us back the blowout we just got rid of. So instead we'll move the **Black point** until the picture contains some absolute black—in other words, until the left end of the histogram curve hits the edge of the chart.

The final picture.

3 We wrap up our exposure edits with **Darken highlights** and **Brighten shadow**. The great thing about these sliders is that they only change part of the histogram. **Darken highlights** has almost no effect on the photo's dark areas and vice versa.

Here we slightly brighten the shadows to draw out some detail. Note how **Contrast** got replaced in our workflow by other, gentler functions. **Clarity** deserves a boost in this picture, and in most pictures. We would only reduce **Clarity** when going for a dreamy photo, showing for example a portrait or flowers.

WHAT YOU'VE LEARNED:

- How to read a histogram
- How to avoid blowout
- How to use the basic exposure edits
- How to add contrast to a photo

Creative Color Edits

Even a technically flawless photo can be missing the kind of atmosphere that would make it worth viewing. But you can take a picture like that, edit it in Zoner, and give it a whole new life.

1 Open the picture in the **Editor** and use **Enhance Color**s in the **Adjust menu**. This shows the Enhance Colors controls in the Side Panel.
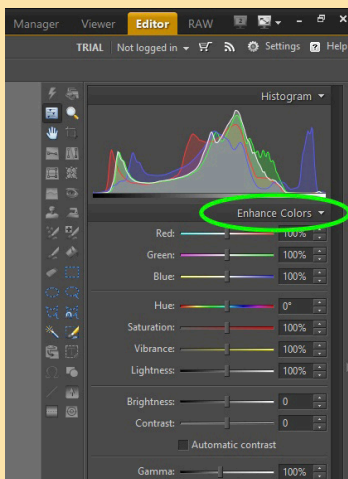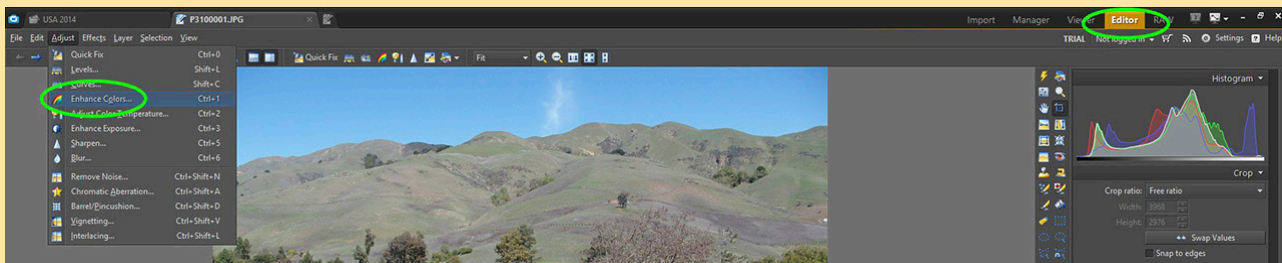

2 This step is more an art than a science. Fortunately the sliders here are fairly self-explanatory, making work with them go quickly. The first three options, **Red, Green**, and **Blue**, add or subtract that color in the picture. Hue shifts all the picture's colors towards one of their neighboring colors. Large shifts to Hue will give bizarre results.

Raise or lower **Saturation** to make the picture's colors fuller or less full.

Contrast and **Gamma** change the relations among the picture's colors, while **Brightness** and **Lightness** mainly brighten or darken them. **Lightness**, unlike **Brightness**, brightens even dark colors.
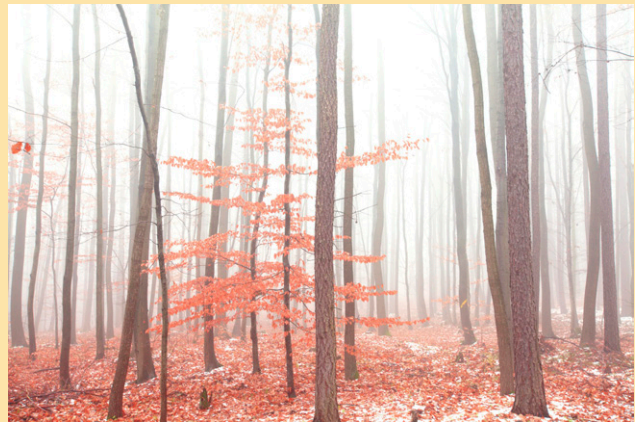
3 This filter is mainly a good way to make a variety of changes to a picture's colors all in the same place.
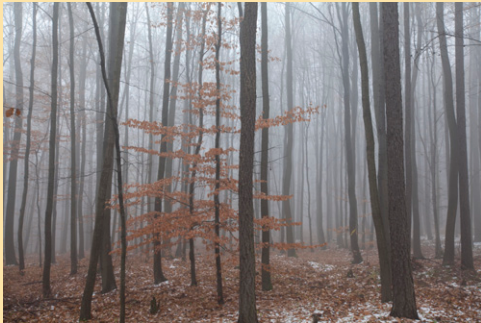
Take for example this picture of a forest.

By raising contrast, adding blue and green, and reducing saturation, we get a much more dramatic picture.

Raising lightness and gamma and drawing down the blue, meanwhile, gives us a more optimistic picture.

WHAT YOU'VE LEARNED:

■ How the settings in Enhance Colors work

■ How to quickly change a picture's overall coloring

Creating Black and White Pictures

FEATURES USED: Grayscale conversion, Quick Filters (Black-and-white filter), Levels

Black and white remains popular even though photographers have been able to capture the world in color for decades now. This is largely because some pictures practically beg for black and white—and a computer makes that easy, even for pictures shot in color. I do this myself sometimes with my portraits, documentary photos, and even landscapes.

1 The first step is to choose the right starting photo. Not every picture will look better in black and white—also called grayscale—than in color.

Badly taken photos won't be rescued by desaturation. And pictures where color plays a role will end up worse—don't bother desaturating a classic "autumn leaves" photo for example! But black and white conversion "calms down" pictures whose colors or contents are too chaotic (e.g. concert photos), and it can somewhat hide noise.

2 I'll be doing my conversion in the **Editor** using the **Effects** menu's **Grayscale** item (Ctrl+G).
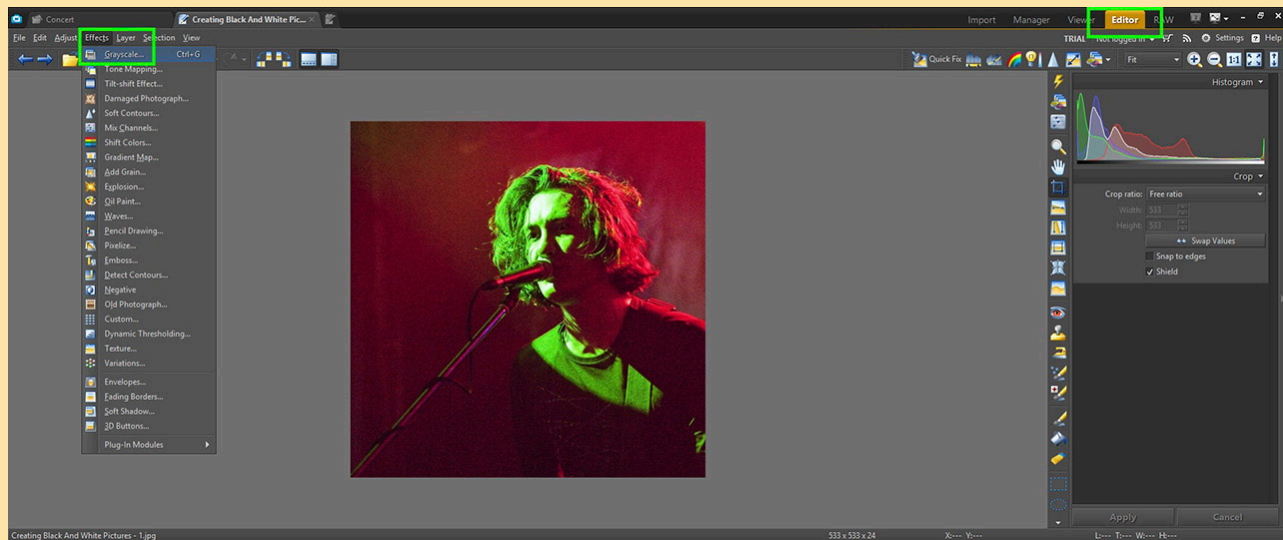
My most important choice was picking a good picture to convert; my second most important choice is the **Method**. It sets how the different color channels in the picture will be converted. So I start by trying every method on the picture and previewing how their results look.
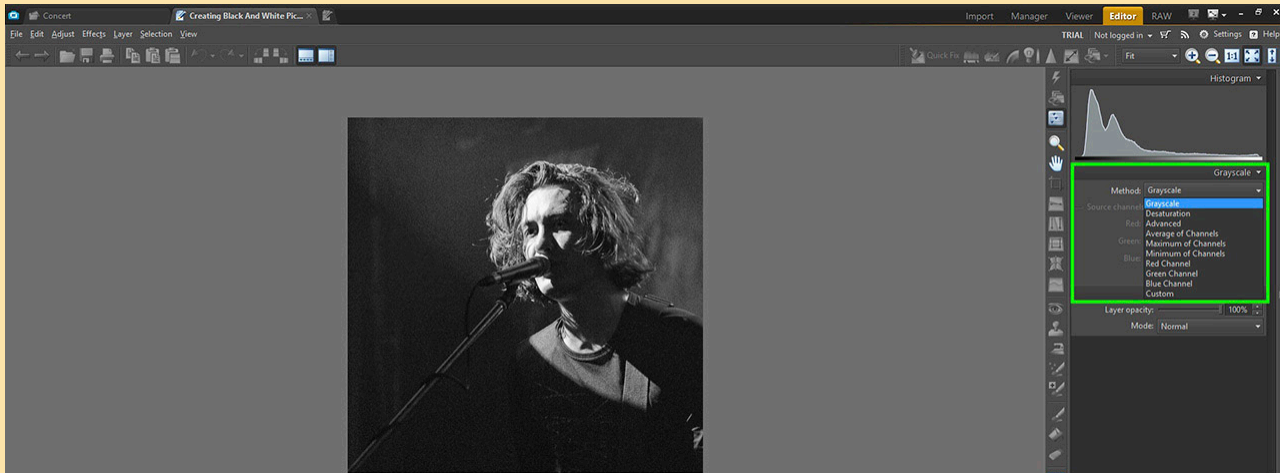
**3** Ordinary **Desaturation** makes this picture look flat, boring, and short on contrast. But **Grayscale** offers another method, also named Grayscale, that is great for getting the job done "well enough," quickly. Meanwhile the same can also be said for the **Black and White** Quick Filter.

The original picture (too much color, ugly looking noise

Desaturation method

Grayscale method

The Black-and-white Quick Filter

4 Of course the absolute best grayscale conversions are the fruits of laboring over the individual color channels. When working with them the basic rule is, the more the given color is represented, the brighter the result. For example when converting solely through the green channel, the green parts of the photo will be almost completely white.

Since every photo is unique, there's no one guide I can give to setting up the channels. Except for portraits... like the one right here. Converting portraits via the red channel hides most wrinkles and skin defects. To increase face detail when working via the red channel, use Custom, raise the green and blue channel levels as well, and **turn on Normalize** (it prevents blowout).
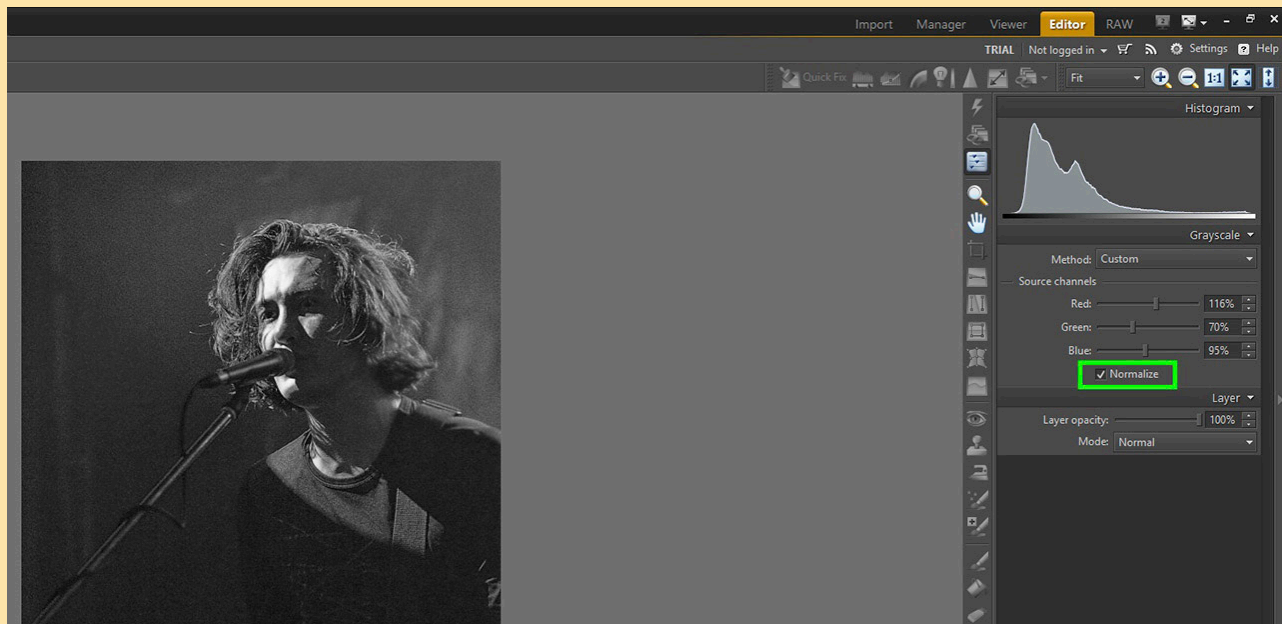
5 As my last edit to this photo, I raise contrast to make it more dramatic. (There are many ways to increase contrast, from **Contrast** in **Quick Edits** to the **Curves** filter.) Always increase contrast in a photo after grayscale conversion. For black and white photos, you want to have true white and black present in the picture. Raising contrast will achieve that.

WHAT YOU'VE LEARNED:

- Why the first step in black and white is picking the right picture
- Why and how to preview grayscale conversion methods before picking one
- How to use the Grayscale method for quick conversions
- How to mix channels manually

Local Edits

FEATURES USED: Selections, The Mask, Blur

"Local" edits are edits that affect just a selected part of a picture. In this chapter I'll explore them via a sample photo. I took it using a compact. I'd like to give it a blurry background so it looks like it was taken using a DSLR with a telephoto lens. Whenever I want to affect just part of a picture—say, to blur a background, or get a black and white background while leaving the subject in color—I select it using Zoner's selection tools.

Zoner Photo Studio contains a wide range of features you can use to select just a part of a picture. These, the "selection tools," are in the Editor's right-hand toolbox and the **Selection** menu. We'll use this our example photo to explore how and why to work with selections.
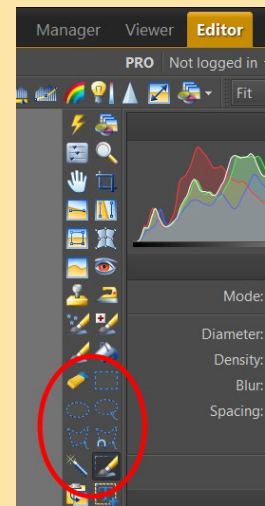
The selection tools.

1 I'll be exploring every single selection tool in this example. I start with the ordinary Lasso (L). By holding the left mouse button while "lassoing in" the person in the foreground, I make my rough selection.

In this illustration, the selection is specially highlighted. I used the Mask **settings for this. I switched from Do Not Show to Normal, which left the selected area colored normally and highlighted the rest in red**.

2 Now I refine my rough selection. I switch to the **Polygonal Lasso** (N). Here I don't hold down the mouse. Instead I click to define the lines that will become the selection outline. I'm using Remove from Selection mode, so this new selection cuts away from the rough selection. Instead of clicking the button for this mode, I held down the **Ctrl** key while selecting. The result is the same—a red minus appears by the cursor. If I take away too much but I don't want to Undo, I can click Add to Selection or hold down **Shift**.

3 The selection is visibly still not quite right. So I'll switch to another tool, the **Magnetic Lasso** (A). This works the same as for the Polygonal Lasso, but with a twist: it detects and "jumps" to contours automatically. I use Sensitivity to set the "stickiness." Generally the "factory setting" of 20 works best here, but this may change depending on the amount of contrast between the selected object and its background. (It's naturally easier to select a red umbrella against a blue sky than a branch in front of a tree.)

4 Next up is the second to last selection tool, the **Magic Wand**. It's a powerful one. It works similarly to Fill (the bucket), "flowing" the selection into every area that looks similar to where you click. Zoom in before using this tool. Not necessarily to 1:1; just enough to be able to click into the small areas surrounding the photo's subject. Here too I **Ctrl**-click to make the wand subtract from my rough selection. If you're using the Magic Wand and the selection bleeds into places where it doesn't belong, use **Undo** (Ctrl+Z), lower the **Tolerance**, and try again. In my case the Wand really helped me to separate out the photo's subject. Last but not least is a tool that is invaluable in combination with the Wand. It's the **Selection Brush** (Q).

5 **It works like the classical paintbrush, but it "paints" a selection instead of color**. Its greatest benefit is the ability to set a **Density**. That's because selection is a **Mask**, so it doesn't have to all be 100% "dense." **The Density sets how many percent we apply with each stroke**. A **Blur** level above zero, meanwhile, expands the selection edges and makes the selection fade out towards them. **Spacing, meanwhile, sets how the tool "skips" as you drag the mouse—whether it is applied at small intervals (small spacing) or large ones**.

In my example I used a **Density** of 70%, a **Blur** of 40, and a **Spacing** of 50. Diameter sets how many pixels wide the brush is. The best diameter to use depends on the size of the picture you're editing. To change it while you work, hold down **Shift** and turn the mouse wheel.

We've blurred this photo's backgound slightly, while keeping the photo's subject sharp.

6 I used the **Selection Brush** around the man's whole profile. I gradually reduced the **Diameter** and **Density**, for finer- grained work. It's good to have a low density at the selection border; otherwise sharp edges make it too obvious that the picture was computer-edited. That's why I reduced the density for the "last round."

Once satisfied with my selection, I took one last look at what I'd actually selected. I switched the **Mask** to **Mask only**. That showed me the precise area selected, and its various levels of intensity. **Selections** can be saved, using the Selection menu's **Save Selection** item, for later reloading. This is useful e.g. when you have to restart Zoner before finishing your edit.

Now I'm switching back to **Do Not Show**. Next, I use **Blur** to blur the background. I pick **Gaussian blurring**: it provides the best imitation of an out of focus background. You can see the effect in the illustration. Because I selected the object and not the background, I had to invert the selection before blurring: **Selection-Invert** (Ctr+Shift+I).

Here we used selective desaturation to keep the photo's subject in color while changing its background to black-and-white.

7 As hinted above, Zoner lets you modify selections after you make them. To expand or shrink a selection, use the same tools as for making selections. The results are visible immediately. This is especially valuable during local exposure edits: instead of having to use the **Effect Brush** to selectively darken areas, you can gradually edit them using selections and basic exposure settings.

You can also use selections for selective desaturation—keeping the subject in color and converting the rest of the photo to black and white.

WHAT YOU'VE LEARNED:

◼ How to use the selection tools

◼ How to invert selections

◼ How to change the mask display

Basic Portrait Editing

FEATURES USED: Align Horizon (H), Quick Edits—Clarity, Black point, Contrast, Elliptical Selection (O), Fill with Surroundings (Shift + Del), Quick Filters

I was alone and sick at home and decided to take a selfie—nothing official, just a pic for the social Web. But, being a photographer, I did use a tripod and a light (just one), and took 120 shots until I found one I could use—one where I had sharp eyes and an interesting face. I decided to work from there with just that photo.

1 This photo contains several easy-to-fix problems. Naturally there are the skin defects to fix. Also, for pictures taken from in front, the eyes should be level.

I start the edit with a whole-picture adjustment: I use Align Horizon to straighten out the eyes.

The source picture.

2 The whole picture has an orange tint. It's most visible in the skin. To fix this, I use Quick Edits—specifically its White Balance section. I use Manual balance (ikona) and try to click with the eyedropper on a part of the picture that should be neutrally-colored, something gray for example. I try a few points in the whites of the eyes until my skin looks normal. (As a learning experience you should try setting, say, the iris of the eye as the neutral color to see how it affects a picture.)

I continue on within Quick Edits, but now I work with Clarity. This increases contrast at contours. In my case, it draws the whole portrait out a bit. Meanwhile, reducing Clarity adds a "dreamy mist" to the picture. As usual, I chose my settings here by experimenting and watching the picture.

3 Now it's time for me to adjust overall exposure. There's no need to lighten or darken the picture overall, since no important part of it is too dark or too light. I just want to add some drama. That's why I use the Black point slider. It sets where black begins—the farther right it is, the more the dark parts of my picture will blend into absolute blackness. My goal for this photo is a dramatic portrait, so I can risk going all the way up to 35. This darkens the shadow over the eye on the left and leaves the hood less detailed. A change to the Black point helps most pictures, because the black in a picture makes the remaining colors stand out. (This is true even for black and white pictures.) I also add a little Contrast (10 is enough here).

My changes were so major that they also shifted the picture's colors towards orange. I repair them again using White Balance.

4 I'm done with global edits, so I move on to retouching. Skin defects, especially the three pimples under the eye and on the nose, are spoiling the picture's overall impact. They are small and their surroundings have a uniform background, so I can take the easy road and use Fill with Surroundings. This copies the surrounding color and texture into the selected area. It's great for "deleting" distractions from a picture. The cleaner my selection, the better this works. But for this simple job I can just use Elliptical Selection (ikona) (O) followed by Fill with Surroundings (ikona) (Shift + Del).

My base picture is ready, so now I start with creative edits. I try some Quick Filters and am the most impressed by Cross process 2, which adds a hint of green.

Professionals won't appreciate my approach here, but I'll be sharing it with my friends, and I think they'll like it.

Simple skin retouching. I removed the top pimple using Fill with Surroundings, and the bottom one using the Clone Stamp.

The final picture, after applying the Cross Process 2 Quick Filter.

WHAT YOU'VE LEARNED

■ That A head-on portrait needs level eyes

■ That Clarity changes can make a photo look stark or dreamy

■ How to retouch out skin defects (and more) using Fill with Surroundings

■ Major exposure adjustments can change a picture's tinting

Removing Red Eye

FEATURES USED: Red eye reduction

When I use a flash, I often end up giving the subject of my photo horrible red eyes. Fortunately there's an easy way to fix this problem in Zoner.
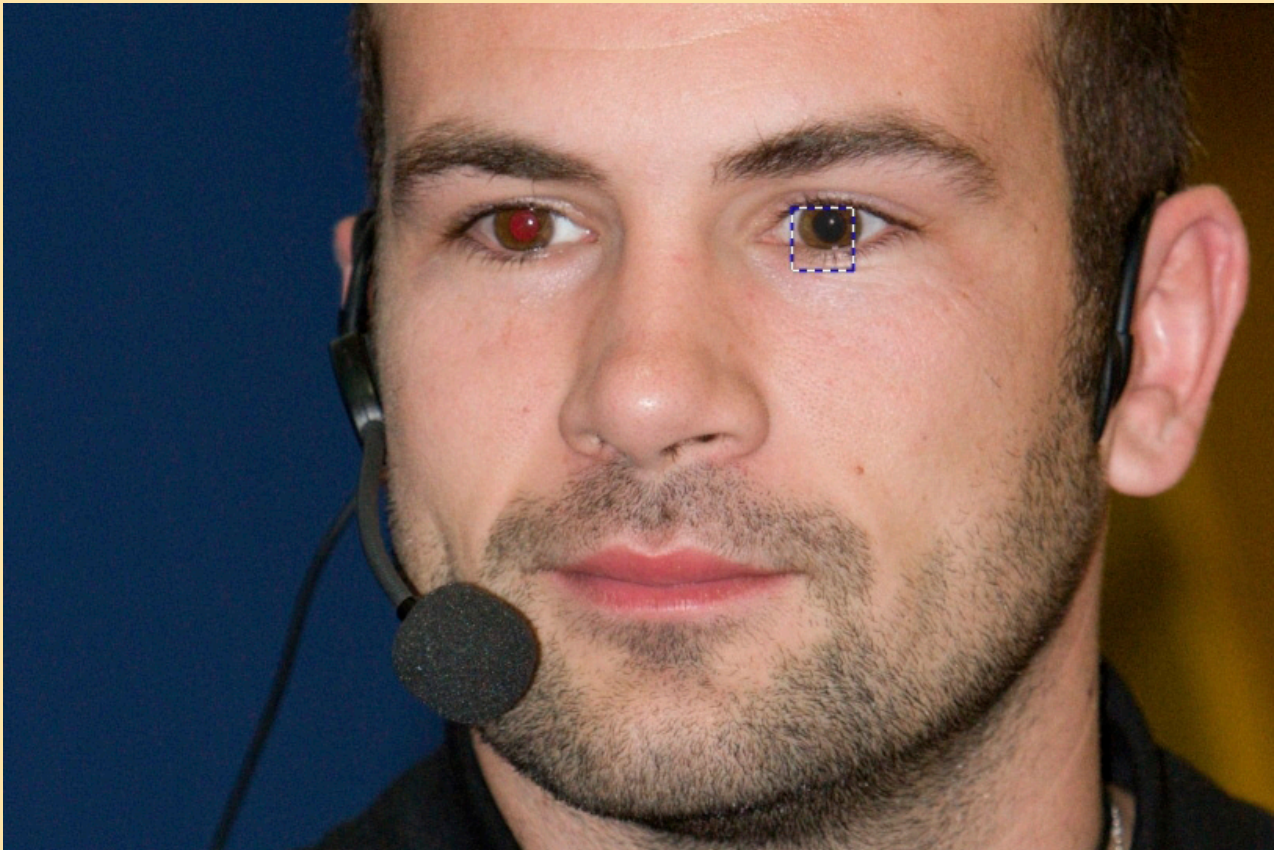
1 Open the picture in question in the **Editor**. Click on the Red Eye Reduction (R) tool in the Toolbox. The mouse cursor changes to a cross-hairs with a red eye beside it.
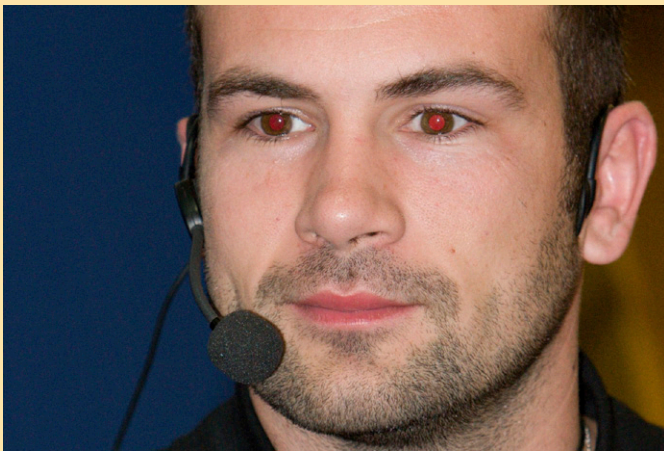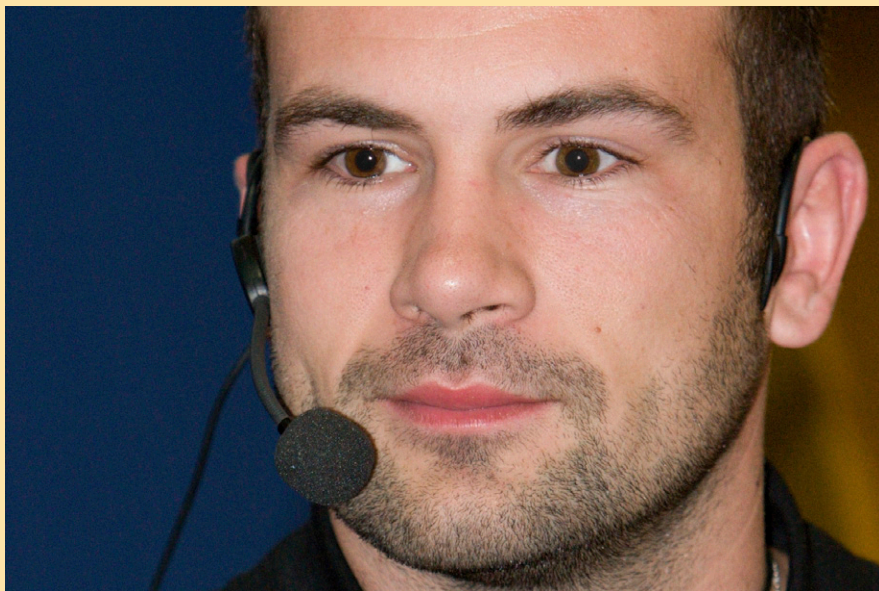

The original picture.
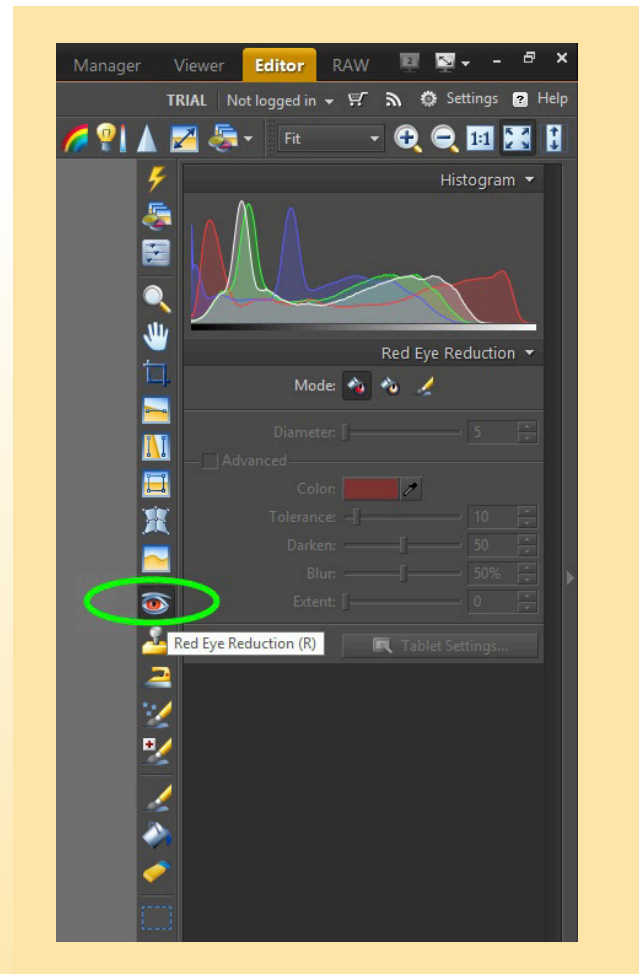
2 Use the first button in the **Side Panel**, named Remove Red Eye. The second button, named Remove White Eye, works the same, but for different problems (e.g. in animal eyes).

Zoom in on the photo. 1:1 zoom (Num *) works best. Double-click the pupil of the eye that is suffering from red eye.

3 In most cases, the whole process of removing red eye from the photo should work automatically. But if it doesn't, just manually adjust the settings. Diameter here sets the size of the eye area that is evaluated. Set it so it covers the whole pupil. Tolerance sets the range of colors to be corrected. Red eye is, after all, not just a single shade of red. Generally from 40 to 60 works best.

The corrrected picture.

4 Darken affects the brightness of the red eye. The higher the color you use here, the darker the color. The ideal range of values is 70 to 90.

Blur sets how wide a region will be used to blend the edited eye region into its surroundings. Generally the smaller value used here, the better.

The Extent value sets to what extent the recoloring will go beyond the automatically selected area. Since the selection is not entirely perfect and sticking strictly to it would leave a red ring around the corrected area, you should always let it be extended like this. Raise it until no red eye is left shining through. 6 to 15 pixels is usually enough.

WHAT YOU HAVE LEARNED:

- How to fix red eye
- How to fix white eye (animal eyes)

Removing Noise

When I'm taking pictures under bad lighting conditions, I set the ISO on my camera very high. That does the job, but it also leaves me with ugly colored blotches on my photos: "digital noise." Fortunately, this noise can be mostly eliminated by editing the picture on a computer.

Noise is one of the most-hated photo defects. Zoner offers a great tool for hiding it—Remove Noise.

1 Go to the **Editor's Adjust menu** and use Remove Noise (Ctrl+Shift+N). This filter offers two main noise removal types. One is for Additive Noise (with configurable strength). The other is for "Salt and Pepper" noise, also known as hot pixels noise, caused by long exposure times.
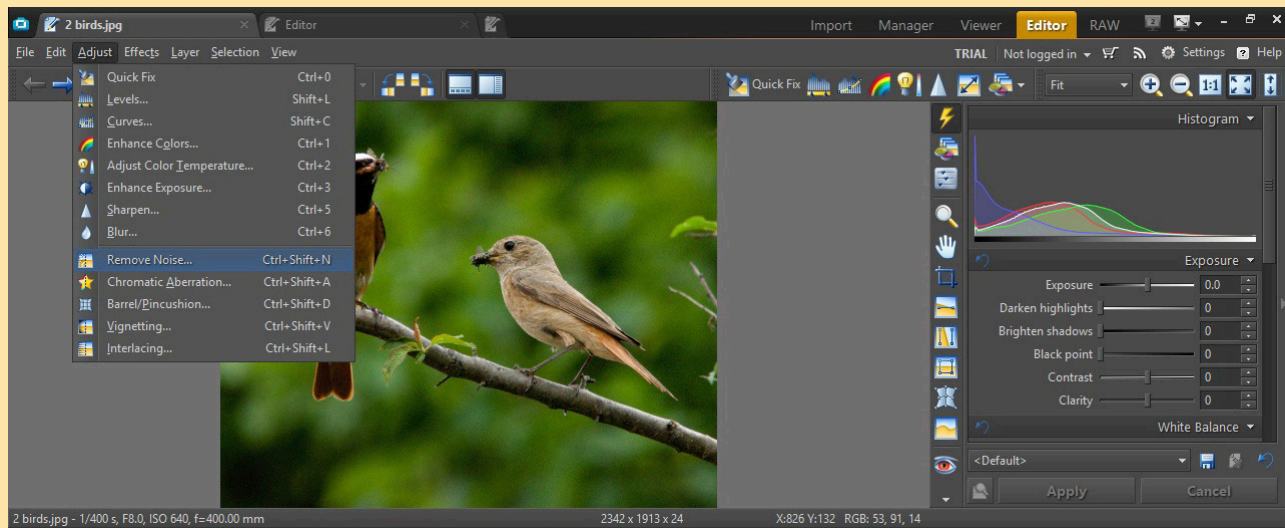
2 To remove as much noise as possible from a photo, turn on Advanced settings. The many settings here give you full control over the noise removal process.

Local correction by color and Local correction by brightness are definitely the most attractive of them. Drag the nodes of the curves shown to reshape them. Their shapes set which colors/which brightness levels get what amounts of noise removal. Use this to e.g. remove less noise from colors found in the picture's subject while removing more from background colors.
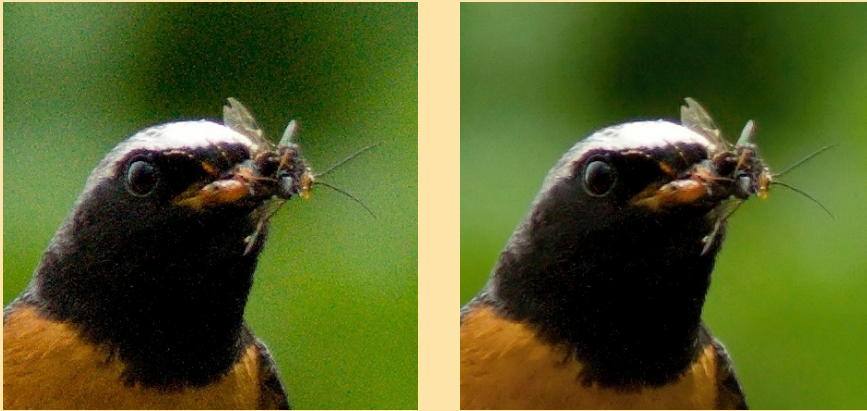
Detail views of the original picture and its de-noised version.

3 Use Color stain removal to remove blotches of color in very noisy images. Use it with caution, however. Used carelessly, it can rob a photo of detail.

Removing noise from a photo is hard work. By correctly guessing its intensity and carefully watching as you make changes, you can almost eliminate noise.

WHAT YOU'VE LEARNED:

■ What ordinary noise and "salt and pepper" noise are

■ How to perform basic and advanced noise reduction

■ How to fine-tune noise correction by color/brightness level

■ How to remove colored stains

Imitating an Antique Photo

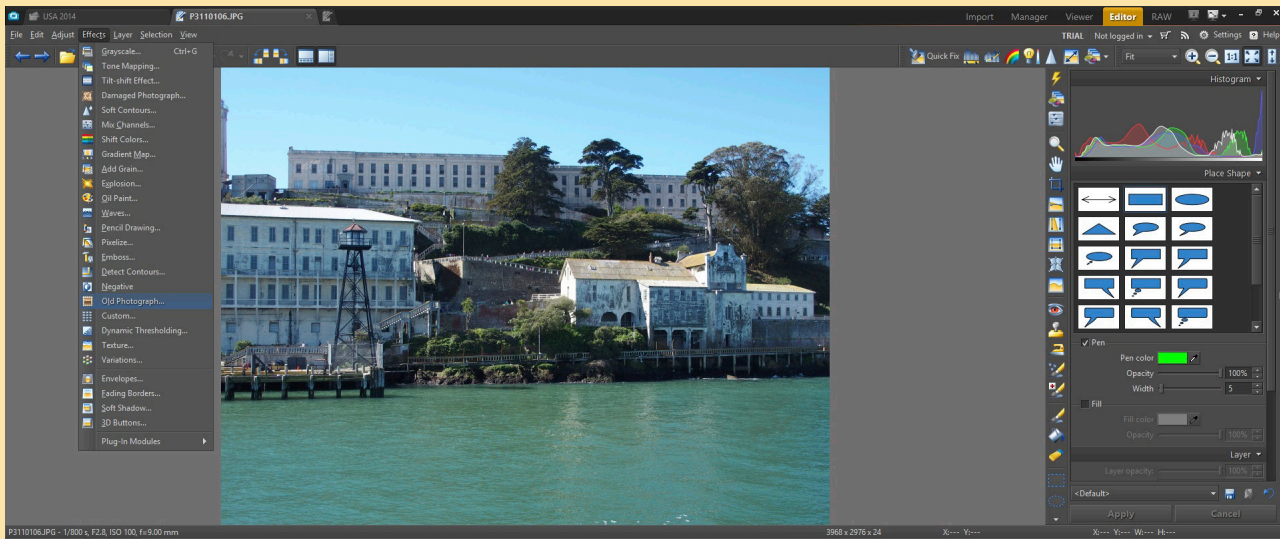**FEATURES USED: Old photograph, Damaged photograph, Add Grain, Vignetting**

I like pictures from the times before there were digital cameras. Yellowing photos from the family album, snapshots from historical chronicles… all of them have—and surely not just for me—a magic all their own not found in the perfect photos from today's cameras.

My sample photo for this section looks unexceptional and could easily be passed over among the rest of my photos. I'll be editing it to give it the atmosphere of days long gone.

The source photograph. Its subject matter makes it a good candidate for this type of edit.

I'll start by tinting the photo. In the Editor's Effects menu I use **Old Photograph** and yellow it using the Age slider. Low values here add a weak hint of sepia, while higher ones go deep into the oranges, just like a real historical photograph.

Now I'll add some more effects that imitate damage to an old photograph. I use Damaged Photograph in the Effects menu. I have Advanced settings active, so that I can manually set by how much to add stains, scratches, and graininess, and also fade the edges. If I want to combine effects randomly, I use New Random Settings at the top right of the window.

If I find a random combination I like, I can edit it from there. I can also the type of Tint to use. Colored elliptical and Colored radial can look very good due how they change the tinting going between the center and the edge of the picture. The two color boxes set the center and edge tinting colors for these types. The Mode sets how the changes are blended into the original picture, and Color intensity sets the strength of the color gradient used. To imitate two common defects in old photographs, I use Stains and Scratches. I can change the Intensity to set the strength and color of these two effects. A negative value gives dark spots and scratches instead of light ones. Their locations are set randomly; for new random locations, I click Random with Same Settings.

Old photos typically have a faded portion. To add some faded areas, I can use Fading. Borders gives the picture an irregular white border. Here too, click Random with Same Settings regenerates the irregular border and the positions of the faded areas. The last item, Grain, creates the equivalent of what we call noise today. Voila! I've got a photo that looks like it came from my grandma's drawer.

If I don't need stains, special edges, or scratches, I can get by with just Add Grain, found in the Effects menu. When adding grain to add age, I set Grain Type to Digital and set the Grain Size to Fine.

There's one last effect useful for an old-photo look. It's the Vignetting item in the Adjust menu. It's normally used to rid a photo of darkened corners caused by lens defects. However, it can also be used in reverse for our purposes. The light corners seen in very old photographs are often quite interesting. To get these using Vignetting, raise the Efffect strength. For dark corners, use negative values. Raise the Radius to make the vignetting affect smaller, but more noticeable, parts of the corners.

Tip: Choose your photos for artificial aging well. Generally the best choices are pictures that show places (especially castles and palaces) full of history, or people in period costumes. For these, it adds to the picture. But for something like recently-built buildings or models in modern clothing, it only subtracts.

WHAT YOU'VE LEARNED

- Not every picture needs to look perfectly sharp and flawless.
- A photo can be made more attractive by adding atmosphere, and that can be done by adding e.g. grain, vignetting, or the Old Photograph effect.
- Damaged Photograph is Zoner's largest toolkit for making a photo look older.

Using Zoner's Quick Filters

FEATURES USED: Crop Tool, Quick Filters, Batch Filter, Custom Filter Settings

He loves it, she loves it, they love it—editing photos quickly and impressively with filters and special effects… even if more orthodox photographers call them bad names.

Zoner's Quick Filters are located in the **Editor's Side Panel**. Quick Filters are actually just presets for the Batch Filter (discussed in detail in another chapter). Thus you can even create and save your own Quick Filters.
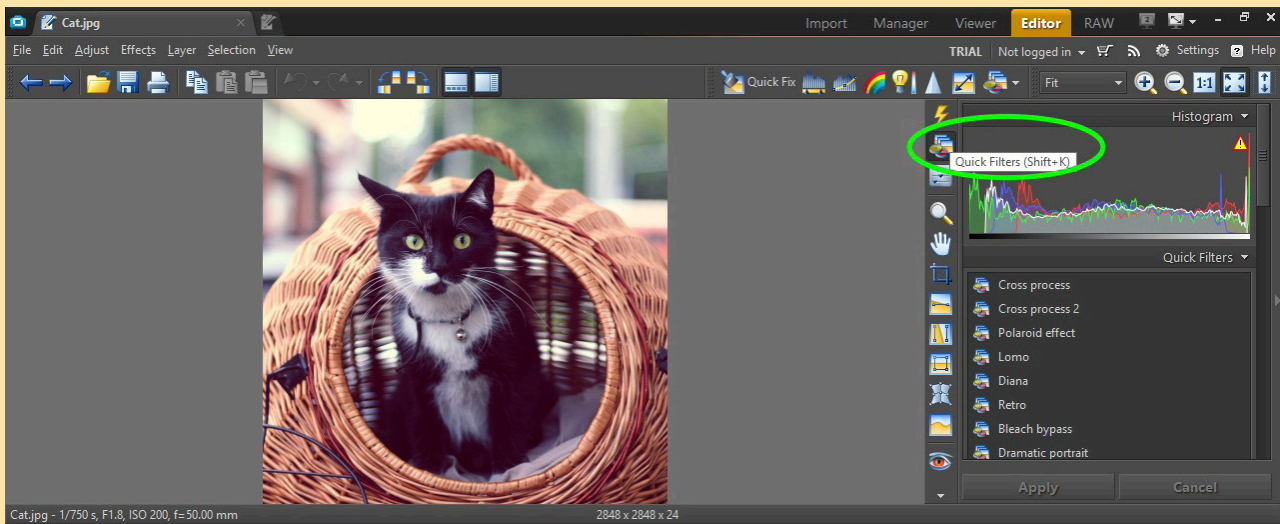
The source picture.

Zoner starts out with **19 Quick Filters**. Work with them is very simple. Click a filter and click Apply—the program does the rest for you automatically. To quickly preview how a filter will affect your picture, just hover the cursor over that filter. A small preview appears immediately.
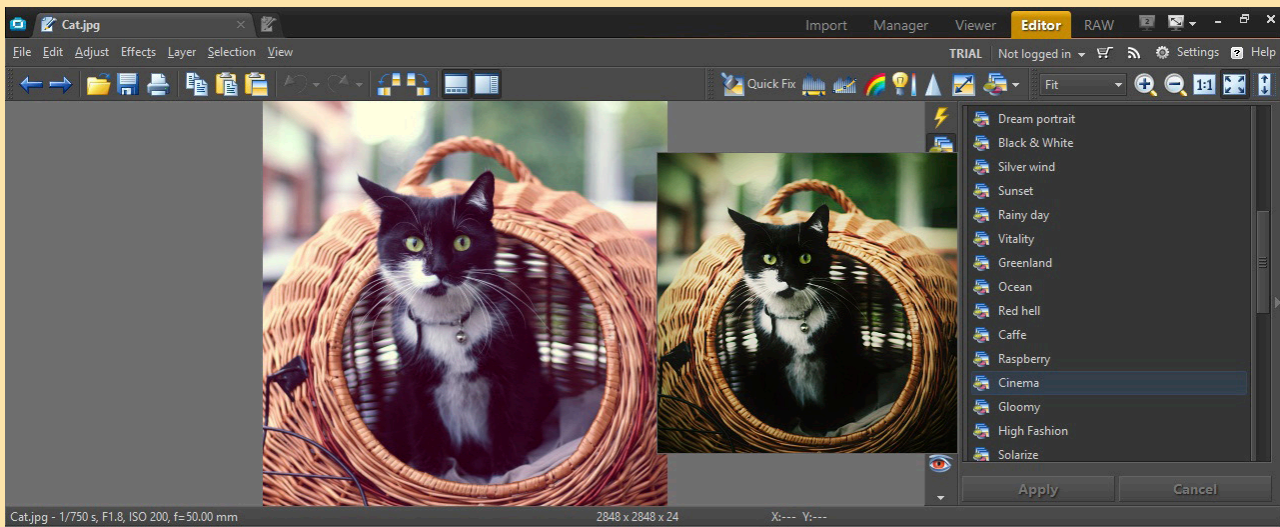
The Polaroid and Diana filters

All but two of the filters affect the whole photograph. The two exceptions are Polaroid and Diana, which imitate the cameras of the same name. These two filters first crop the picture to a square format, so before applying one of them, make sure your picture will look good with that automatic crop, or crop it yourself using the Crop tool (C) and a fixed crop ratio of 1:1. Then just select Polaroid or Diana, click Apply, and you have yourself a stylish photo.

Batch filters and custom filter settings

Below the list of filters there is one more item—Custom filter settings. It starts out empty. This is a place for your own saved presets from the function named Batch Filter.

Polaroid effect filtr

To create a custom filter, use the Batch Filter function (Edit | Batch Filter, Ctrl+Q) and save your settings as a Preset. This makes the filter available as an item in the Batch Filters menu, and in Quick Filters as well. Like any batch filter, your creation can include e.g. color adjustments, blurring, sharpening, giving texture, adding text to the picture, etc. It's all up to you and what you want the filter to do for your photos.

Quick Filters can create impressive pictures, but you should be thinking of your composition, etc. already while taking the shot, so you don't have to make up for bad photos using great filters.

WHAT YOU'VE LEARNED

■ Quick Filters are a quick and easy way to change a picture's look and give it a whole different atmosphere

■ Before using the Polaroid and Diana filters, crop the picture to a 1:1 ratio

■ Filters created in Batch Filter can be used as Quick Filters via Custom filter settings

Creating HDR Photos

FEATURES USED: HDR via Exposure Blending, HDR via Tone Mapping

The human eye is still a bit ahead of cameras' light sensors. Above all, our eyes can handle a broader dynamic range. This is a problem, and there's a trick you can use to fight it: HDR. It stands for High Dynamic Range.

1 HDR becomes attractive the moment you have a scene with both very light and very dark areas, and you want a photo expressing details in both these areas. For example, a beach on a sunny day, shot from the shade of a beach bar. Normally you can't take a shot of this scene that keeps full detail in both the light of the beach and the shadows of the bar. Thus you can choose between a discernible bar interior with a white spot (the beach) in the middle, or details on the beach and a completely blacked-out bar.

HDR lets you give your final picture more dynamic range—more contrast—than the camera sensor lets you capture. It's this trait that makes HDR so eye-pleasing.

There are two basic roads to HDR in Zoner Photo Studio. For one of them, you need 2-3 shots of the scene at various exposure levels. For the other, you can use one shot or a hundred.

2 To take multiple shots that differ "only" in exposure, use a tripod. Although Zoner offers to automatically align pictures for you, a small change of perspective is still enough to ruin the HDR process and leave you without the great picture you aimed for.

Turn on the camera's Bracketing function while taking the shots, so the camera will automatically take several shots in a row at various exposure values. But check on-camera before you leave the scene. Even with a tripod and bracketing, moving people, clouds, etc. can still ruin a shot by leaving "ghosts."

3 Now take these source shots, and use Exposure Blending HDR in Zoner to join them together. Essentially the program examines each shot, finds the parts of it with a good level of detail, and joins these parts of the different exposures into one picture. Naturally this means that for Exposure Blending HDR, you need at least two source pictures. And it's better to use three. One with the "correct" exposure, one slightly underexposed, and one slightly overexposed.

In the **Manager's Create** menu, use **Exposure Blending HDR**…, and then select your source photos.
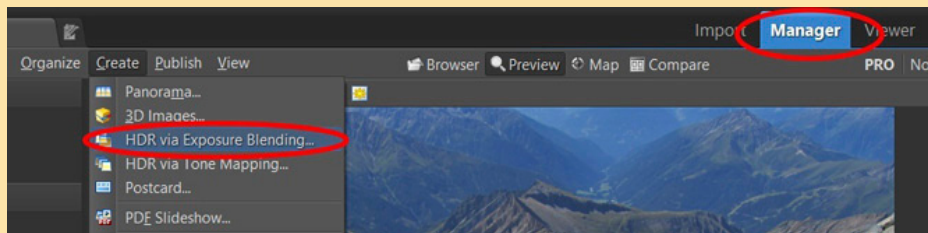
Then Zoner inspects the pictures' EXIF data to confirm which shot is underexposed, overexposed, and in the middle. If the photos have bad or missing EXIF data, you can also choose by hand. Then you align the photos. This brings us to the HDR settings step of the window.

Use the first three sliders to the "feel" of the HDR, and the last to set its intensity, that is, "strength." Here are some good basic starting values: 100, 50, 50, and intensity to taste. Use these settings for both lights and shadows. Spend time playing with the sliders early, to get a feel for how they "work." Be careful to avoid the notorious beginner's mistake of getting carried away by HDR and using too strong an effect, getting a final result that belongs in a coloring book, not a photo album.

In HDR photography, there's a thin line between creating unbelievable results and creating results that are just plain not believable. For a quick look at the latter, start an HDR job and turn the Intensity up to 100.

Once you're satisfied with your results, open the picture in the Editor for further edits, or save it directly.

4 The other road to pictures with high dynamic range is tone mapping. This is also in the Create menu, under **HDR via Tone Mapping**…. Unlike exposure blending, this lets you work with an unlimited number of input photographs (from one to infinity). However, they must have EXIF exposure data.

For this technique a much wider range of settings is available, and above all, two methods, based on **Brightness** and **Contrast**. To simplify here: the first three settings set the effect's strength; the rest set the picture's tint. Each picture needs different settings, and here too it's good to play with the sliders once before getting serious.

Tone Mapping bears an even greater risk than Exposure Blending of crossing the line from believable to "coloring book."

WHAT YOU'VE LEARNED:

- How to express details in both the darkest and lightest parts of a scene using HDR
- How to take source pictures for HDR
- Two methods for creating an HDR photo

Shrinking Pictures for the Web

**FEATURES USED: Save as Web JPEG, Resize, Sharpen**

I never put my photographs on the Internet at full resolution. It would take forever for them to upload, and visitors to my web gallery would also have to wait a long time for them to load. That's why I always shrink them before uploading them.

1 First I **create a copy** of the photos. After all, I don't want to shrink the originals! Then I decide in my head at what file size in bytes I want to upload the photos. This will range from a few dozen kilobytes to a few megabytes. Then I decide what dimensions I want for the photos. There's no point in a larger size than my audience's expected screen size. I'll be going with 1200 pixels for the longer side (whether that be the height or the width—it doesn't matter) and a maximum file size of 1 MB. (If I were uploading to Zoner's *Zonerama galleries*, I wouldn't actually have to shrink the pictures at all, since **Zonerama has no size limits**.)

2 I use **Resize** (Ctrl+E) to resize the pictures in the **Manager**. In Resize I set the Width and Height in pixels. I put 1200 for both of them, and make sure Keep proportions is turned on. Method sets what method Zoner uses for the resizing. The default, Supersampling, usually works best.
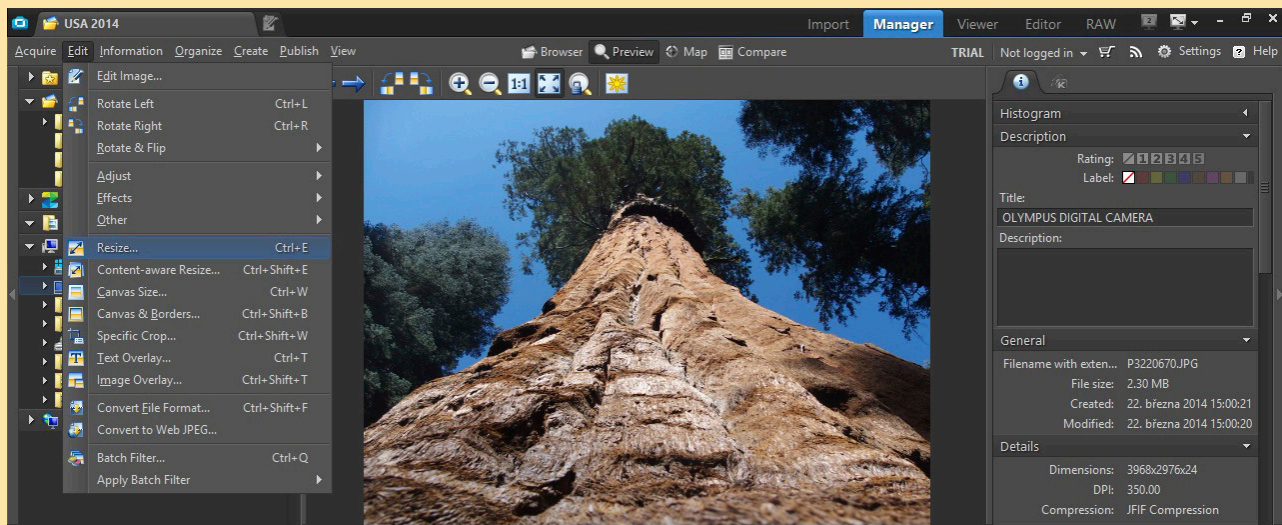
3 Now I use File-Save as Web JPEG... and set the file Size that I need. This is set in kilobytes. You can think of a megabyte as 1000 kilobytes.
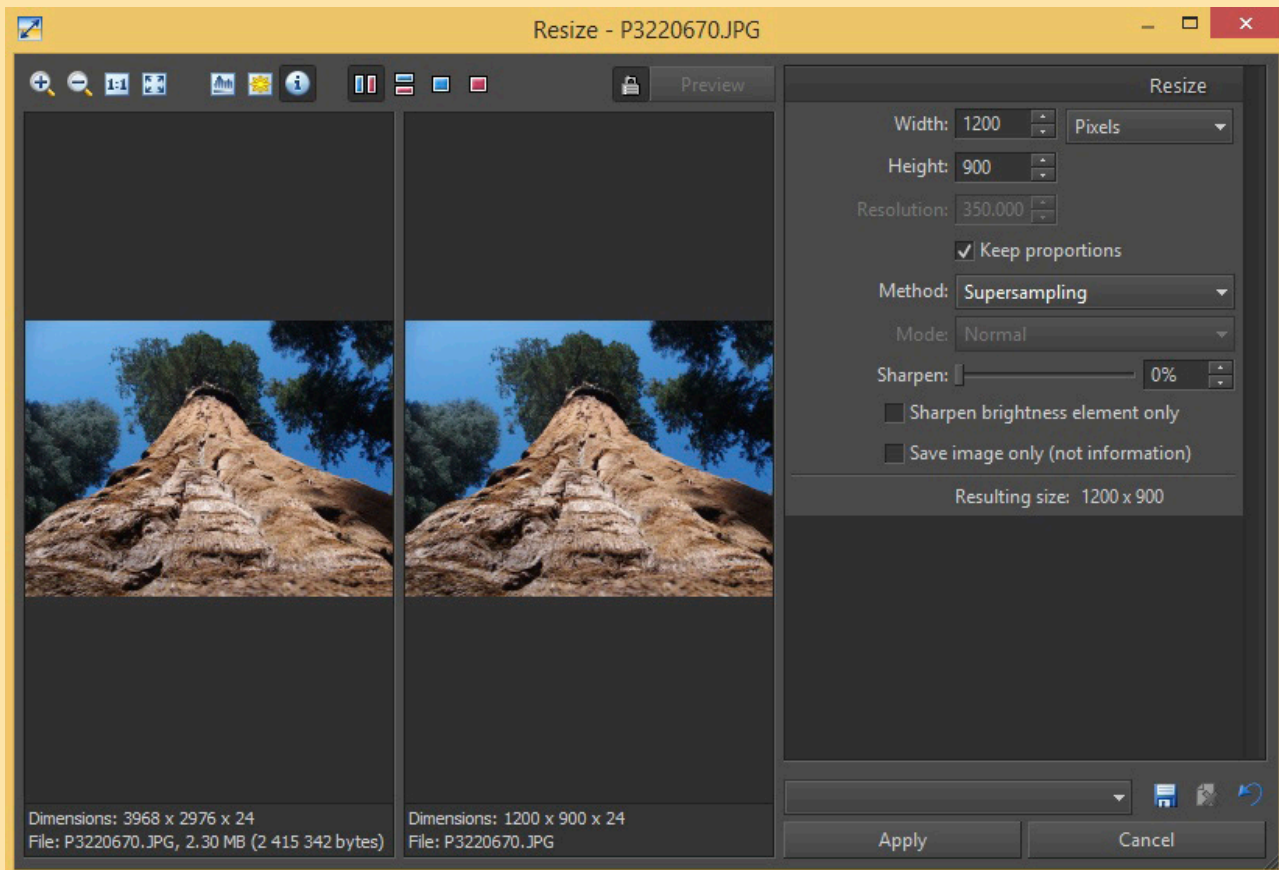
Quality and Sampling are best left at factory settings; for example leave Sampling at Progressive. But I do turn on EXIF. Some galleries can use EXIF to automatically show photo information. I can do without an EXIF Preview though.

ICC profile can be useful for getting pictures to display right in all situations, so I turn it on.

You won't need to worry about accent mark issues for filenames in English, but for many languages, removing accents can prevent Web headaches.

I like to sharpen my pictures after shrinking them, because shrinking a picture can blur sharp contours. I use **Sharpen** (Ctrl+5) for this. I use Overall Sharpening unless I especially need high quality. When I want the highest quality, I use Gaussian sharpening, which also lets me fine-tune the algorithm used. I feel the best Effect strength is 75%, and Radius should be as low as possible. For Noise reduction, I use a value of 20.

Naturally, shrinking, saving for the Web, and sharpening are actually best done all at once, on a whole planned web album at once. Use the **Batch Filter** for this batch work.

WHAT YOU'VE LEARNED:

■ How to resize a photo

■ How to automatically shrink a photo by maximum file size

■ How to sharpen a photo after shrinking

Zoner Photo Studio

And don't forget Zonerama.com, the online community where you can upload and post an unlimited number of photos.