# Printing Your Family History

## With as Little Pain as Possible

# Begin With the End in Mind

### Black & White or Color

Including color pictures in your family history will really make it special. Unfortunately, it will also make your bill especially painful. Color costs more. It is possible to print most of the book in black & white with just a few well chosen pictures in color. The least expensive way is to give up the idea of color and have the entire book printed in black & white.

If you scan the photos yourself be sure you scan them at a print quality resolution. (See the Scanning Basics section.) Scan the pictures you intend to be color in color. Scan those pictures that will be printed in black and white as grayscale.

### Finished Size

Decide what size (height and width) you want your book to be before you begin. The two least expensive sizes for your book are letter size (8.5x11) and half a letter size sheet (5.5x8.8).  Other sizes are possible but will add to the expense of the book. All software programs let you choose your paper size. You may need to create a new custom size if you are not using letter size. Don't worry about pagination. Pagination is the placing or rearranging of pages for print. The press has software that does that easily. If you try to do it yourself and do it wrong, prepress will have to straighten it out.

### Fonts

The most important requirement for fonts is that they be easily readable. *Something too decorative is difficult to read.* Confine those fonts to the title page. ALL CAPITOLS IS ALSO HARDER TO READ. They've done studies. Its just how the brain works.

Most software has a default font. This is a common, easy to read font that will work for most things. If you stick with that font you can be sure the press will have it on their computers. If you want to use another, less common font, you will need to plan ahead. Here are some options. You can call the press and ask if the font you want to use is available on their computers. You can put the font on your disk and bring it to the press with the finished file. You can save the finished document as a pdf file and eliminate the whole issue. ( See The Joys of PDF under Digital Workflow.) Or, if you have a nice printer, you can make a hard copy and bring it in to be scanned. (But PLEASE, see the Cut & Paste section.)

### Margins

No matter what type of binding you choose, binding takes space. Be sure to leave good margins on all sides. The most common software choices give you an inch or an inch and a half by default. The easiest thing to do is just leave it at that. If you know how, its not a bad idea to tell the program you want some extra for the binding edge. But if you don't know how, don't worry about it.

The visual appeal and readability of your document will be enhanced by nice margins. Tight margins make the whole thing look cheap and crowded.

### Quantity

The press schedules work flow using the size of a job to determine the amount of time it will take to print. We would like at least a good guess as to the number of copies you'll need when beginning the Work Order. The final number can be changed up to the day they are

printed. If we have already printed them and you want to reduce the number, you will be charged for the extras.

## Visit the Press

### *Ask Questions*

No question is too stupid to ask. Don't be afraid to keep asking until you get a clear answer. If you don't understand what we're saying, there is a good chance we're not understanding your needs any better.

### *Accepted File Formats*

The University Press has the most common software programs. We have both Mac and PC computers. When in doubt, ask.

### *Preferred File Format*

The print industry is moving more and more toward a pdf workflow. (See The Joys of PDF under Digital Workflow.)

### *Time Frame*

As a University Press we are obligated to put on campus work first. We do try to complete your job as soon as possible. Some times of year are naturally busier than others. When you visit the press or place your work order, ask how long we expect the job to take. Be sure to tell us your needs as well. We need to know if you want it in time for a family gathering.

### *Cost*

There are many factors that determine final cost. Paper choices, number of pages, binding, and quantity are just a few. Don't rely on what your friend paid five years ago. You can receive an estimate on the price once the varying factors are known.

### *Available Paper Choices*

The first question involving paper choices is whether you want color or black and white pictures. At present, we are limited to just a few papers on the digital color press. There are several paper options available on the black and white printer. A conservative choice works best for family histories.

## Plan Ahead

### *Christmas Comes Early*

If you intend to give your books to the family as Christmas gifts, be sure to plan ahead. September is not too early. July is even better. That will allow time for press proofs, binding, and Murphy's Law. The bindery is especially busy before Christmas.

### Family Reunion Time

Everyone plans their reunions for summer time when the kids are out of school. We try to stick to a first come, first serve order. So, come early and beat the crowd. If you have a hard deadline be sure to let us know up front. The good news is, late spring and early summer are not extremely busy times for on campus work and we will try our best to accommodate your needs.

## Time Equals Money

### Prepress Charges

There is a fixed rate charged for any time your book is worked on by prepress personnel. This cost is often the largest portion of your bill.

### The more you do, the less we have to do.

Everything you can do to reduce the amount of time your project spends in prepress saves you money. An electronic file requires much less prepress time than scanning hard copies. If your book has very many photos, it will cost you less money to buy a scanner and learn how to use it, than to have the press scan them.  If you are not comfortable doing it yourself, we would be glad to help.

### Proof Read Before You Take it to the Press

All spell checking and fact checking should be done before you bring it to the press. Minor changes can be made during the press proof stage, but it is in your best interests to avoid them whenever possible.

### You Are Charged for All Proofs

A single proof is assumed and built into any initial estimate. You will also be charged for any additional proofs. Multiple changes and proofs slow down the entire process and make meeting your deadline much harder.

## Cut and Paste

You may choose to create hardcopy pages by gluing or taping items to each page. It is possible for the press to scan these pages and create your book.  It is the most time consuming and expensive way and produces the poorest quality. Here are some reasons why.

### Shadows from the Edge

Any item glued, taped or in any way physically stuck onto the page may scan with a line around it. This is caused by the shadow at the edge of the item. You may choose to simply accept the marks. Or, you may choose to have prepress clean it up for you. This option adds time and expense to your project.

### Tape, Especially Old Tape

Even the clearest tape isn't really invisible. When the light from the scanner hits it, it will reflect differently than the paper. The scanner may interpret this as an image and show it on the page. Old tape that has yellowed is especially bad.

### Photographs are Different

Photographs must be scanned using different scan settings than text. (See the Scanning Basics section.) Which means every one of your pictures must be scanned separately and then added back onto the page electronically. Time and money again.

### Preservation

Please keep in mind that any glue or tape used on your photos and original documents has the potential to permanently damage them. Even Post It notes leave a residue that collects dirt.

## Digital Workflow

### Electronic Files

Electronic files are any documents generated on a computer. Word processing files, digital photos, scanned documents, & etc. are all electronic files. We use those files to print your book. A hardcopy, or non-electronic document must be scanned and saved as an electronic file before printing.

### Better Quality

A document that starts as an electronic file prints with a higher quality than a scanned document, especially text. Photos printed on your home printer and then scanned will never have the quality of the original.

### Less Prepress Time

A book brought to the press in digital format takes much less prepress time than a hardcopy. Remember, anything that saves prepress time saves you money.

### Things we can do

We can combine multiple files into a single document. We can print divider pages on different papers. We can insert printed tabs into the document. We can print part of the pages on one color paper and part on another, or five others. We can add page numbers. We can white out existing page numbers, or anything else. We can put smaller items on the page more than once to save you money. We can paginate the document to make a booklet. We can resize pages. And the whole thing comes out collated, if we want it to.

### The Joys of PDF

**Platform Independent** PDF files created on a PC can be viewed and printed on a Mac, and vice versa. That makes it ideal for sharing and printing Family History information. You can print a pedigree chart from PAF and post it on a web page, email it to your cousin, or include it in your printed family history. Magic!

**No Font Problems**  A properly created PDF has all the fonts embedded. The press doesn't need to have the font on their computers. Your cousin doesn't need to have the font.

**No Print Driver Problems**  When the file is opened on other computers with other printers connected to them, nothing moves. The margins, lines, fonts, and page numbers are not rearranged to suit the other printer. Everything remains exactly where you put it.

**No Missing Pictures**  Some programs only link pictures to the page. You have to include the picture files when you come to the press. A properly created PDF file has all graphics embedded eliminating that chore.

**Table of Contents**  Because nothing, including the page numbers will change, you can make your table of contents in advance rather than waiting until just before we print.

**How to**  Be sure you choose Press Quality on your settings when you make the PDF. Choose color only if you really want color, otherwise choose black and white.

**CutePDF Writer & etc**  Beyond a few programs that allow you to create a PDF from within, you will need software help to create a PDF. If you have the full version of Acrobat, not just the free reader, you can print a PDF from any program on the same computer. But Acrobat is expensive. You can create a PDF using an online conversion tool available at *createpdf.adobe.com* There are some smaller programs available that will let you create a PDF. A few are even free. One of them can be found at: *www.cutepdf.com/Products/CutePDF/Writer.asp*  **BYU-Idaho makes no guarantee of this or any other software and assumes no liability for any use of the same.**

# Scanning Basics

Get to know your software. Every scanner comes with scanning software. Some are more useful than others. If you are purchasing a new scanner, ask about the software.  Check *Family History Magazine* for scanner reviews. You need to be able to choose the resolution. You need to be able to switch easily between grayscale (black & white) and color. You need a bitmap or text setting if you intend to scan text. You need to be able to scan at higher percentages than 100% if you want to enlarge small photos. Scan all photos at 300 dpi (dots per inch). If you intend to enlarge the picture, scan it bigger instead of enlarging after the scan. Scan text at 400-600 dpi. Anything higher just makes a huge file for no reason.

PhotoShop Elements is the best photo editing software you can get for under $100. Save the file as a tiff or tif, not a jpg.

## *Originals Are Always Best*

**Photocopies**  Look at a photocopy of a picture with a magnifying glass. See the lines and/or dots? The scanner will see those.

**Newspapers**  Look at a news print of a picture with a magnifying glass. See the dots? The scanner will see those.

**Home Printers**  Look at a home print of a picture with a magnifying glass. See the lines and/or dots? The scanner will see those.

**Preprinted (magazine, postcards, flyers)**  Look at any printed picture with a magnifying glass. See the lines and/or dots? The scanner will see those. Also, be aware of copyright issues

with preprinted material. You can't use them in your book without written permission from the copyright owner. Yes, that includes church materials.

**That's a Moiré**  Anything that starts out with lines or dots in it will probably develop a moiré pattern when it is printed. The printing process puts ink on as a series of dots. If those dots don't line up exactly with the pre-existing dots (and they won't) you get a moiré pattern. Have you ever seen a man on television with a loud tie that seems to jump and waver with every move? That's a moiré! The pattern in the tie is at odds with the lines of the TV screen.

## *It Won't get Any Better*

Examine the photo or document closely. It won't get any better. Yes, there are some techniques we can use to improve some things. But once you place it in a Word document, those changes are limited to what Word allows. Word is not a photo editing program. If you want us to make any improvements to your old photos, let us do the scanning.

## *Grayscale*

**Photographs**  If the photograph is black and white, scan it in grayscale. Scanning it in color increases the file size and can cause problems with some printing processes. If it is color but you intend for it to be printed as black and white, scan it in grayscale. You'll be much happier with the finished product.

There are some things other than photos you may need to scan in grayscale. If you see shades of gray in the image, it won't work to scan it like text. See above.

## *RGB vs CMYK*

Remember your science. Light is composed of **r**ed, **g**reen, and **b**lue. (RGB) White is all light spectrums together. Black is the absence of light. Digital cameras capture light, and lack of light. All files from a digital camera will be in RGB mode. Scanners (and color copiers) capture the image using light and create RGB files. Some more expensive scanners will convert to CMYK.

CMYK stands for **c**yan, **m**agenta, **y**ellow, and blac**k**. They are ink colors. High end presses combine cymk inks to print every color in your photo. If you intend to print something in color, and you have scanning or photo editing software that allows you to convert to cmyk, do it. If not, consider giving us the color scans and letting us convert them to cmyk for you before you place them in Word or similar program.

Many people are satisfied with the conversion of their snapshots by the digital press. There is usually very little color shift. The most common problem is a slightly flat appearance.

## *Bitmap*

Bitmap is the mode used for straight text. There are no shades of gray. Every pixel is either black or white. If you are old enough to remember the very first Xerox copiers, you'll be able to imagine what that this setting does to photos.

## *Scanning Do's and Don't's*

**Plastic Sleeves**  *Always* remove things from any plastic sleeve. You will not be happy with the scan otherwise.

**Glue and Tape**  The wrong kind of glue will cause ripples in paper. You've seen it. The scanner will see it. Even if you can't see the "invisible" tape, the scanner might. Try to avoid these sticky problems.

**Sparkle and Shine**  There are some very pretty stickers in the scrapbooking section of the store. They sparkle and shine and reflect the light from the scanner and ruin your scan. Anything foil, iridescent, or glittery will scan as a black blob.

**Red and Yellow**  In grayscale, red scans as black, pure yellow vanishes. A flag sticker with gold fringe will scan as black stripes and no fringe.

**Speckled & Colored Paper**  Even when scanning text in bitmap mode, the color of paper your original document resides on effects the outcome. As with ink (see above) red paper scans as black. So do purple and orange to some degree because they have red in them. Blue and green paper turns gray in grayscale mode and just looks dirty if scanned in bitmap. The good news is that yellow paper and yellow highlight marker disappears just like yellow ink. Speckled paper leaves, you guessed it, speckles.

# Potential Problems

## *Incompatible Software*

We will still try to open your files even if we do not have the same software you used to create them. There are likely to be problems with the layout of the document even if we get it open. Check with the press before you begin your project  to avoid this problem.

## *Printer Drivers*

Windows operating system uses tiny computer codes called print drivers to format your page to suit the printer plugged into your computer. When you save a file on a cd and open it on another computer with a different print driver, the software repositions everything to suit the new printer. This can cause unexpected and unhappy things to happen to your book. One thing you can do to lessen the impact is to use hard page breaks. Don't just hit the enter or return key over and over to move to the next page. Insert a hard page break.  It is found on the Insert menu in both Word (Break) and WordPerfect (New Page). Also, consider the Joys of PDF in the Software Choices section.

## *Fonts*

If we don't have the font you used, many programs will use the default font Courier. `Courier is the ugliest font on the planet.` The two easiest ways to avoid this is to either use a common font such as Times New Roman, or save your document as a pdf. (See The Joys of PDF in the Digital Workflow section.)

## *Missing Pictures*

Some programs allow you to link a picture to the page in a picture box rather than embedding it in the document. The advantage is that it creates a much smaller file. The disadvantage is that you *must* bring all those picture files with you to the press. Without them we cannot go ahead with the printing. If the final file is saved as a PDF, all the pictures come along for the ride. (See The Joys of PDF in the Digital Workflow section.)

## *Huge Files—Break It Up*

The larger the file, the more likely it is to slow your computer down. The older your computer, the more true that is.  Break the book up into separate files for each chapter. Call

each file chapter1, chapter2, & etc.. That way you will have a much easier time working with them. And since they are clearly labeled 1,2,3, they will be easy to assemble at the press.

### Save Often

You've spent years working on this project. Research. Gathering photos. Proofreading. Double and triple checking everything. Then the thunder rumbles and your power goes out and the last ten pages are gone. Save often! Save every time you stop to think about what to say or do next. Save when someone interrupts you. Save whenever you think of it.

### Make a Backup Copy

Or worse, your computer crashes and the whole book is gone. Make a backup copy every once in a while, burn it on a cd, and keep it somewhere else in the house, or even someone else's house or at work. The more changes you've made the more you need to make a new backup copy.

### Proof Reading

There is no way to get something that big perfect. It won't happen. Addendum to Murphy's Law: You've sweated bullets to get everything right and take the finished copies to the family reunion. The first person to open the book will find a mistake. Have *at least* one other person proof read for you before you bring it to the press.

# Software Choices

### Microsoft Word

**1-1.5" Margins**  Word starts every document with one inch margins on the top and bottom and 1.5 inches on the left and right edges. That's plenty for all types of binding we offer.

**Insert Page Break**  When you get to the end of a chapter and want to start the next paragraph on the following page, please don't hit the enter or return key over and over until the curser moves to the next page. Insert a page break. Go to the Insert menu at the top of the program. Choose Break. Choose Page. Multiple returns often shift when the file is opened on another computer.

**Binding Edge**  If you are having your history spiral bound you may add an extra quarter inch on the inside edge. If you have kept the default margins, it isn't really critical. You'll be OK without it. If you are having your history three hole punched, you may want to add another half inch to the inside edge.  Your text will look more centered on the page. But if you kept the default margins the holes won't go through any text, so you'll be OK either way. If you are having your history perfect bound, like a paper back book, you must leave at least a one inch margin on *all* sides. After the inside edge is glued into the cover, the other three edges are trimmed to make a smooth, even edge.  If you are having your book hard bound, you will want a half inch more on the inside edge.  To add a binding edge in Microsoft Word, go to the File menu at the top of the program. Choose Page Setup. In the middle of the Margins window it has an option for multiple pages.  Choose Mirror Margins from that list. Now look above that area. You can increase the size of the inside margin by the needed amount.

## *WordPerfect*

**1" Margins**  WordPerfect starts every document with one inch margins on all sides. That's enough for all types of binding we offer.

**Insert New Page**  When you get to the end of a chapter and want to start the next paragraph on the following page, please don't hit the enter or return key over and over until the curser moves to the next page. Insert a page break. Go to the Insert menu at the top of the program. Choose New Page. Multiple returns often shift when the file is opened on another computer.

**Binding Edge**  If you are having your history spiral bound you may add an extra quarter inch on the inside edge. If you have kept the default margins, it isn't really critical. You'll be OK without it. If you are having your history three hole punched, you may want to add another half inch to the inside edge.  Your text will look more centered on the page. But if you kept the default margins the holes won't go through any text, so you'll be OK either way. If you are having your history perfect bound, like a paper back book, you must leave at least a one inch margin on *all* sides. After the inside edge is glued into the cover, the other three edges are trimmed to make a smooth, even edge.  If you are having your book hard bound, you will want a half inch more on the inside edge.  To add a binding edge in WordPerfect, go to the Format menu at the top of the program. Choose Page and Page Setup. At the top of the window that comes up are two tabs. Go to Layout. Under two sided printing click on the option for Book.  Move down to two sided binding. The margin it expects you to increase there is for the inside edge.

**Will Create PDF File**  One of WordPerfect's best ideas was to allow you to save your document as a pdf file. (See The Joys of PDF in the Digital Workflow section.) Go to the file menu.  About half way down it says Publish to. Choose PDF. It will ask where you want it saved and what the name of the file should be. Easy! One caution. Open the pdf after you have saved it and check each page for formatting problems. WordPerfect recognizes this as a different print driver. It may shift things around on you. Unfortunately, if you do not have any kind of printer plugged into your computer, this option will not work.

## *Microsoft Publisher*

**Pagination**  Publisher has a few printing options that allow pagination. Pagination is the placing or rearranging of pages for print. The press has software that does that easily. If you don't know exactly what you are doing, please leave this to us.

**1" Margins**  Publisher starts every new document with a blue line indicating one inch margins on all sides. You can follow that box with your text box or not as you wish. That's enough space for all types of binding we offer.

## *Adobe Indesign*

**More Expensive**  InDesign is part of Adobe's Creative Suite (CS) that includes Photoshop, Illustrator, and other programs. It can also be purchased alone.

**More flexible**  It is a higher end program than Word or Publisher. It's target user is the design and printing professional. Don't let that scare you away though. If you plan on doing several books, or if your project is complicated, and if your budget can stand it, it may be worth the investment. There is a learning curve, but there are also dozens of printed books about it.

**Will Create PDF File**  InDesign will save your finished document in PDF format. That eliminates font and picture issues. (See The Joys of PDF in the Digital Workflow section.)

### *Adobe PageMaker*

PageMaker has been replaced in the Adobe family by InDesign and is no longer being updated. If you already have a copy and want to use it, please see the Joys of PDF in the Digital Workflow section for instructions on how to save your document as a PDF.

### *QuarkXpress*

Quark is a professional typesetting program. It is used by newspapers, magazines, yearbooks, and publishers. If you already own a copy, by all means use it.

**Font Issues**  At the press, our copies of Quark are all Mac format. If you have used a windows versions of Quark to make your book, the file can be opened on a Mac, but the fonts may not translate. Your best bet is to print the final document as a PDF.  (See The Joys of PDF in the Digital Workflow section.)

## Suggested Paper Choices

### *Insides*

**24# laser (B&W Printer)**  This is a slightly thicker paper than the usual copier/printer paper. It is a brighter white and feels smoother to the touch. The extra thickness helps keep the pictures from showing through on the other side of the page.

**80# matte (Color Press)**  The digital color press uses special paper. The text weight is a very nice paper for both text and pictures. It comes in gloss and matte finishes. We don't recommend the gloss for books. You don't want glare on a page you're trying to read.

**Mix & Match**  It is possible to have us print most of the book on the black and white printer and then insert the pages that were printed in color on the digital press. The two papers mentioned above are not exactly alike, but they go together nicely.

### *Soft Covers*

**Cardstock**  If you are having your book spiral bound, perfect bound, or three hole punched, we have several nice cardstock weight papers in stock you can choose from. We can special order paper if you have something else in mind. Any of these can be printed on by the black and white printer.

**Cover**  Cover weight is slightly heavier than cardstock. We carry some very nice choices. They will work for any of the binding options above.

**Color Covers**  A book looks very nice with a cover printed in color. It is more expensive than black and white but the result may be worth it to you.

# Bindery Options

### Three Hole

There are several reasons you may want to put your family history book in a binder. You can add new information. You can place it in a standard Book of Remembrance. And it is the least expensive option we offer.

### Spiral Bind

We use a plastic spiral that wears well and doesn't snag your clothes like the metal spirals you remember from grade school. The cover can be of any of the cardstock or cover weight papers. We can print on either side of either cover.

### Saddle Stitch

A magazine with staples in the spine is saddle stitched. We take large sheets with four pages printed on each, two side by side on the front and two side by side on the back, fold it in half and put staples in the spine. This option is only good for small projects. Our booklet maker will only handle 21 sheets easily. So, 20 x 4 = 80 pages plus a cover. We can print on the inside and back of the cover.  Sizes can be 5.5x8.5 to 8.5x11. We offer a square back option as well.

### Perfect Bound

A paperback book is perfect bound. Covers can be on the cardstock or cover weights or you may choose colored pictures on the cover.

### Hard Bound

We have a standing relationship with a bindery in Utah. We print the book and then ship it to them to be hard bound. This is the most expensive and most time consuming option. If you need it by a specific date, please plan ahead.