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Wednesday, 08 June 2011

Securing Your Film Photography Future

By **Ctein**

Last week there was much wailing and gnashing of teeth amongst the film fans in our group over the future loss of their favored media. If what you're concerned with is B&W film photography, then I'm here to make you happy. This is *really* easily addressed (color's much harder).

I'm serious.

I'm not just talking through my hat—I've used the following strategies with success at various times over the past 40 years, beginning when Kodak made the original Pan-X 120 go away circa 1973.

Buy a small deep freeze. Buy a 20-or-whatever-year supply of your preferred B&W film. Stick it in the freezer. Pull out rolls as you need them. I can guarantee they'll stay good for decades. You've spent, probably, a few thousand bucks (depends, of course, on your burn rate) to guarantee your future in film.

Commercial B&W developers and fixers may disappear, but they're very easy to compound—the raw chemicals are cheap, and they will be readily available for a long time. If you fear they won't be, buy a large sealed tub of each chemical—keep them sealed against air, moisture and light and they will also last many decades. B&W film processing is easy to do, too. Any photographer can learn it.

Darkroom print papers could become a problem, unless you stock up on your favorite. That's not a new problem; it's been vexing B&W printers since Edward Weston's prime. You can either live with possibly losing your favorite paper, as folks have for 70 years, or stock up and freeze it, just like your film. Your choice.

Darkroom equipment lasts the better part of forever, unless you're careless. Cameras? Not so much. Afraid your camera body will die on you before you're done with the film phase of your life? Then buy two (or three if you're really paranoid). These days, used, very-good-condition camera gear can be bought for an average of 10–20 cents on the dollar, compared to mid-'90s prices. If that's too rich for your blood, well, then photography's altogether too rich a hobby/career for you. Find something else. I mean it. The bargains are amazing; you can't hope for better. It's the perfect time to buy film equipment. Compared to the bad old days, your redundant gear is still quite the bargain.

Keep one body in reserve. Pull it out every few months, cycle the shutter speeds and other controls, send it to your favorite repair guy for a clean and checkup every few years (and, yes, such folks will be around a *very* long time, although their services may not come cheaply). If/when you break the first one, switch to the second...and the first one will be a ready supply of parts that will keep the second one in repair.

Can I promise that this will make you safe for decades? Nah, life doesn't come with guarantees. Odds are better than 90% though.

This works. It's not expensive. Over the long run, it will even save you money. The majority of your expenses are upfront, but they're not impossibly large, and, forever after, your running costs will be very modest.

Color's another story

Sorry. I've no easy answer for color. The hangup is the processing. If commercial processing goes away, most photographers will be out of luck—color film processing is a demanding thing, requiring accuracy and precision beyond most photographers' abilities. Color developers can be tricky to compound and some of the component chemicals are obscure and may become very difficult to obtain. You can probably drag out your color photography life for five years if commercial processing becomes unavailable, but I'd not count on more than that.

Any chance for Kodachrome or dye transfer ever coming back, as one reader asked? As close to 0% as you can calculate, for a bunch of very good reasons. For a start, running a K-14 line requires two masters-degree-or-better chemists, and the chemistry is *not* stable. If you wondered why Dale Labs didn't just decide to run one batch of K-14 a year, it's because they figured that most of you would balk at paying $100+ a roll for processing, which is what it would take.

But, as regards B&W? Easy! Stock up and stop worrying. You'll be a lot happier in both the short and long run.

Ctein

Ctein's regular weekly column appears on TOP on Wednesdays.

Featured Comment by **David Dyer-Bennet:** "In case anybody is worried about power failures on their freezer full of film—film is much easier to store safely than food is.

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"Food reacts badly to being frozen and thawed multiple times (it tends to mess up the texture, which is important), and can become unsafe with relatively short times (hours) spent at room temperature.

"Film, in contrast, is rated to last years at room temperature. If you lose power long enough that your freezer gets all the way to room temperature (which would be quite a while, if you don't open the lid), all that happens is that the film starts aging at a 'normal' rate. (If you're in some hideous climate like, um, mine, where it got to 103°F yesterday, letting the film get all the way up to 103° would not be good; but a closed freezer in the basement will take a very long time without power to get up to 103°; in fact a basement won't get up to the full outside temperature ever—the ground is a huge heat-sink. Of course, lots of hot places routinely build without basements.)

"You do need to be careful about condensation when refrigerating film. What you want to avoid is having warm, most air come in contact with the cold film; water will condense out, soak into the gelatine, stick the layers to each other, and ruin it. (120 film generally comes with each roll in a sealed wrapper already; plastic 35mm film cans are adequately air-tight for this, so you can toss those in an ordinary bag and take them out freely, but let them come up to room temperature before breaking the air seal. If you have film that doesn't have its own seal, a zip-loc freezer bag is perfect.)"

Posted on Wednesday, 08 June 2011 at 09:38 AM in Ctein, Film and Darkroom | Permalink

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Comments

Fortunately the film phase of my life equates its duration.

Posted by: cb | Wednesday, 08 June 2011 at 10:58 AM

If per chance you do buy lots of film to store -- make sure you put them in an air tight container, water & moisture proof.
Learned this the hard way, thinking those 35mm plastic containers the film is in will do the job. Lost a lot of stored film thinking they where. It was Ilford film and they did confirm the canisters where not long term moisture proof. Buy a cold light for your enlarger -- tungsten bulbs may not be availably in years to come.
Have fun.

Posted by: Carl L | Wednesday, 08 June 2011 at 11:12 AM

Or, you can just develop your B&W or color film using coffee! Just Google it to see the options.

John Nollendorfs

Posted by: John Nollendorfs | Wednesday, 08 June 2011 at 11:19 AM

As long as people drink instant coffee, you can always make Caffenol ...

Posted by: Brett Davis | Wednesday, 08 June 2011 at 11:22 AM

You are absolutely right about black and white. I would like to add that all components of black and white chemistry are used in other industries (hydroquinone is used in hair dyes e.g.) so they will be always available. There are very good developers that can be made from instant Coffee, Vitamin C and washing soda(Caffenol) or from Paracetamol(acetamenophen) tablets(Parodinal). Stop bath is just dilute acetic acid (vinegar) and can even be replaced with water bath. For fixers, the main ingredient is Sodium or ammonium thiosulfate. Thiosulfates are used in medicine (chemotherapy, antidote for cyanide poisoning etc) and precious metal industry. Toners can be made directly from metals (gold, Selenium etc). Photographic bleaching agents are used in pigment industry (for creating prussian blue color). Wetting agents (e.g. PhotoFlo) are just very mild, very pure detergents (use dilute baby shampoo). I can't think of anything else that is used in B&W processing. So no need to worry about chemistry. Just freeze your film and paper and live happily ever after.

Posted by: Chaitanya | Wednesday, 08 June 2011 at 11:43 AM

Interesting info from Ilford about 35mm cans (at least theirs) not being adequately moisture-proof for long-term cold storage. If they say not, one probably shouldn't count on it; but I did store store lots of Ilford films in their canisters in the freezer for years without trouble (though rather more Kodak cans).

Thanks, Carl L!

Posted by: David Dyer-Bennet | Wednesday, 08 June 2011 at 12:19 PM

"For a start, running a K-14 line requires two masters-degree-or-better chemists, and the chemistry is not stable."

What if you live in a household with two masters-degree-or-better chemists?

I'm being flip here, of course. Neither of us are the right sort of chemist, our basement is not an appropriate venue for that sort of work, and we have a kid in the house. Also, I usually do monochrome photography and I dislike film.

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Posted by: Nick | Wednesday, 08 June 2011 at 12:30 PM

I fully agree with your comments, but there is one potential fly in the future ointment. That is service and parts for older film cameras. My first camera was my father's Exakta. When I had some income, I bought my own Exakta VX (around 1957), and used it until I switched to Nikon. By the mid 1960's service for Exakta was limited. While now I suspect its impossible to get service or parts unless you can do your own using a number of otherwise unusable cameras for parts.While I don't think this is an immediate problem for Nikon, Canon or other major brands, I suspect that it already is for some of the smaller brands, and in 20 or 30 years could become a problem for some major brands. When you have a "spare" camera you don't use, it can develop problems such as stiffening of lubed surfaces and hardening of, or brittle cloth shutters. And heavily used cameras require lubing and worn part replacement, as well as repair to electronic metering parts. Perhaps some long thinking repair shop is stocking up on parts, tools, and manuals for that future time, but I'm not aware of it.
Richard Newman

Posted by: Richard Newman | Wednesday, 08 June 2011 at 12:37 PM

Thiosulfate is also used by aquarists to remove chlorine from tap water, photo supplies are much cheaper than pet shops if you have big ponds or fish tanks. It will be interesting to see when the tipping point arrives and photographers find it cheaper to buy pet shop dechlorinators.

all the best phil
ps. congrats to all on the amount of quality posts.

Posted by: phil | Wednesday, 08 June 2011 at 12:54 PM

In the In For A Penny, In For A Pound Dept.

If power failure are a concern, get a generator of some sort.

Posted by: Dennis Allshouse | Wednesday, 08 June 2011 at 12:57 PM

Dear John,

Coffee, for that matter any B&W film developer, will not develop color film to a color image.

Developing color film to B&W is a curiosity that produces inferior negatives. I cannot see any reason to do it unless one is forced to.

~~~~~~~~

Dear DDB and Carl,

Yeah, bundling the film rolls in ziplock baggies in cold storage is a good way to keep out condensation as the film warms up. It's also a lot more efficient to work with and find the film you want than hundreds of loose rolls rattling about in the freezer.

Repeated freeze/thaw cycles are not a problem; you can put any film you don't use back in the freezer. The important thing is that film should not be exposed to a continuous stream of ambient temperature/humidity air while warming up. The amount of water vapor trapped inside a film can is insignificant; it's the unlimited supply available from circulating air that makes trouble.

Ought to mention, I supposed, that long-term cold storage won't work for ultra-fast films like Delta 3200 or TMAX P3200. Radiation fog will kill them before thermal degradation does. Don't figure on them being good for more than 5 years, maybe 10 if you're lucky.

pax / Ctein

Posted by: ctein | Wednesday, 08 June 2011 at 01:09 PM

Developing color film is easy; just use the three bath dry chemical kits. *Creating* the color developers from scratch isn't something to be done without a lot of chemistry knowledge, though.

There is a retired Kodak engineer in Australia whose hobby is recreating Kodachrome and K14 process. But note: he's a retired Kodak engineer! And it's his hobby, not the start of a new manufacturing business.

Coating your own glass plates can be done today, and for 8x10 it's cheaper than buying some B&W films. The chemistry will always be available, so no problems there.

If color goes away and all you have is B&W, then remember that you can always make three exposures with appropriate filters.

Posted by: Brian Miller | Wednesday, 08 June 2011 at 01:22 PM

I haven't tried it myself yet but am reliably informed that color film development (both E-6 and C-41) isn't significantly harder than black and white. Temperature control and timing are more critical but there are plenty of hobbyists doing color processes in Paterson tanks and tempered water baths with excellent results. I'm considering trying it for E-6 but my local pro lab still does C-41 at a price competitive with DIY.

Availability of the chemicals, well, that's another matter and might be the real killer. You could, of course, stockpile the kits in sufficient quantity to develop all your frozen film. The powder-based kits keep well, not sure about the kits based on liquid concentrates though.

Posted by: Paul Glover | Wednesday, 08 June 2011 at 01:40 PM
~~~~~~~~

Well, I bought several industrial deep freezer units, then I bought a bunch of black and white TV sets back in the 1970s. Now, when one of them goes bad, I just throw it away and defrost another! Works great!

Posted by: Bill Rogers | Wednesday, 08 June 2011 at 01:44 PM

I would think that if everyone did go and buy their 'lifetimes' supply of film it would bring about a very rapid demise of film production as future sales plummet. I suspect there are enough users and new users to maintain a niche facility without the personal outlay of thousands (that don't exist in my account). I can understand some desire to retain your favourite film stock, but I imagine the numbers doing this to be in a small and relatively wealthy category: if you can serve your own interests in this way, why not, I guess the market will decide in its usual 'democratic' fashion, but it might be an error if, for example film does stick around: I guess if you have thousands to do this the gamble isn't relevant to you.
My own observation of camera prices is that the quality gear has risen significantly in price compared to a couple of years ago, so much so that dealers are asking, and getting pretty much 'film era' prices. I think this is due to popularity as much as the desire to get what you always wanted - common to men of a certain age. Even if this is just a blip in trends there has been something of a renaissance in film use and camera buying. The forums at APUG, FADU and photo.net bear out the revival of interest, albeit not for the masses. I know this 'debate' will rumble on until film has been, literally, talked to death and Ctein may be a little provocative, but my hope lies in, for example, the regenerated facilities of Europe (Adox and Foma, particularly) - how crazy is that ?

Posted by: Mark Walker | Wednesday, 08 June 2011 at 02:18 PM

Sky is not falling.... yet. When Fuji announced ceasing production of Neopan 1600, I bought 100 rolls. At my current burn rate, that ought to last 10+ years. I have been using Tri-X as my standard film for years and it probably will be one of the "last film standing" so no need to hoard it yet.

I have 2 XPan, when the electronics start to fail, oh, in 10 years, then I will get more worried. Then again, there are plenty of cameras from the 1980s that still work well so may be I don't have to worry too much.

Once I develop the film, the rest of the workflow is digital. My concern is that no one produces new film scanners any more. Hopefully my LS-9000 will outlast my film use.

I just bought a Shen Hao 617 camera. Nothing will fail with that camera barring physical damage so I am all good there.

Content Aware technology in PSD 5 and up is the best thing that can happen to film shooters. Life is still good for film users, at least for a while longer.

Posted by: Richard Man | Wednesday, 08 June 2011 at 02:41 PM

I am done with film.

From 20 bucks for a roll of velvia plus processing to 50 bucks a roll to print and process B &W film with a 3 week turnaround to getting hand checked at every airport, to having to manually meter my medium format is just not worth it.

Yes, the results in B&W are better when the exposure is bang on and when you have the time to manipulate the images in the darkroom but 75% of my stuff is in color now (slides) and if I move to digital I just have to make one adjustment to change it to b&W and then just pay for printing costs on the enlargement. I also just shot a test roll in color neg film and got it back from the lab, and went yuck, color film grain sucks.

Posted by: Richard | Wednesday, 08 June 2011 at 02:42 PM

What? No emulsion-coated glass plates? That's apparently what they did in Germany immediately after WWII - My dad and uncle both had their portraits taken by photographers who, lacking a supply of film, coated glass (salvaged from broken windows?) with possibly home-made B&W emulsions. Still intact today and possible to make prints from.
Also, even though pre-manufactured platinum printing supplies were dropped in the 1920's one can prepare the emulsion for coating paper and the developing solutions from chemicals available today (plus still get some prepared supplies from certain vendors).
I agree that color printing will be problematic without manufacturer support (whatever happened to DyeChrome for Ciba/Ilfochrome?) but I anticipate B&W film, paper & chemicals to be around for our lifetimes (with the possible exception of someone's particularly favorite item).

Posted by: Rick in CO | Wednesday, 08 June 2011 at 02:55 PM

"If power failure are a concern, get a generator of some sort."

My mother's cousin, at his house in Michigan where there are frequent power outages, has an "instant on" generator. It senses the loss of power and starts automatically. The lights just go off for a few seconds. When the grid comes back up, his system switches back over to it and turns itself off.

He also has a system that circulates hot water constantly, so there's never a wait for hot water--it's hot the instant you turn it on.

He used to work for a home products company, knows all the cool technology.

Mike

Posted by: Mike Johnston | Wednesday, 08 June 2011 at 03:10 PM

As far as colour film is concerned, processing it yourself is a hell of a lot easier than is often thought. I learned to process in a kitchen in a holiday home when a friend bought some chems round. He did one run and then I did the next with simple heated water tank and rotary drum.

Since then I've processed film accidentally at 5 degrees below and 2 degrees above optimum with little visible problems (especially if you are scanning). Timing isn't critical either (about 10% over time equals a 1/3 stop push for E6 first developer - the rest of the process runs to completion).

The colour specific chemicals aren't that complicated either. Nothing a good chemical company couldn't know up a large batch of.

Making colour film is the big headache and that is mostly to do with coating film with very thin layers with good quality control. Check http://www.makingkodakfilm.com/ for great details.

If Kodak and Fuji *both* go out of business or scrap all of their film production lines then it will be unlikely that another company will develop a new film from scratch.

However, although consumer colour film market is collapsing, there is probably enough worldwide business in stills and particularly cinema to make a profitable company. And if that is so then shareholders will insist that the film business is sold off rather than written off. This may happen to Kodak. Fuji is another matter - they defy all logic :-)

Posted by: Tim Parkin | Wednesday, 08 June 2011 at 04:04 PM

re colour : can we not buy a load of E6 chemicals and freeze those as well ? I think when it gets to that stage though I will simply switch to digital. I am imagining also that there will always be someone somewhere (probably in China) still making the stuff..... que sera, sera.

Posted by: Robert P | Wednesday, 08 June 2011 at 04:46 PM

I keep my film in deep freeze mainly because it's hard to obtain in my country for a reasonable price and we have to resort to buying larger quantities and stocking. So far we had an issue with the freezer and found the films floating in three inches of water. Only some Fomapan rolls were damaged; the rest of the films were either packed in nylon or in plastic containers. Now everything is packed in ziplock nylon bags for extra safety. You also want to de-ice your freezer when it gets icy.

Posted by: ggl | Wednesday, 08 June 2011 at 04:57 PM

Despite my personal preference for digital, I am not sure colour film will necessarily vanish from the planet.

It depends on whether the decline will level out to a residual demand that is enough to keep a small scale industry in profit. Fewer emulsions and a handful of mail order labs perhaps, but I suspect the sustainable level is somewhat lower than where we are today, especially in the developing world.

It will no longer be mainstream, but that in itself may add to the mystique and become regarded as a high quality, specialist offering by some professionals. (To be honest, it's kind of there already).

That's fine with me. I think any medium for expressing artistic creativity is "a good thing" even if I don't use it.

Posted by: Steve Jacob | Wednesday, 08 June 2011 at 05:24 PM

For storage I've taken the top off of the canister and put in a vacuum seal bag (FoodSaver system) - machine sucks out all the air - the open canister keeps the roll from any possible crushing - pop in freezer. Actually tried this with 8x10 Forte Polywarmtone. The bags are limited in size.

Posted by: George Clapper | Wednesday, 08 June 2011 at 05:44 PM

I can't get excited about a film preservation as a viable long-term plan.

Why?

four words:

Cosmic rays fog film.

Reference

http://motion.kodak.com/US/en/motion/Support/Technical_Info

"Ambient Background Radiation (Effects on Raw Stock")

"Ambient gamma radiation is composed of two sources: a low energy component which arises from the decay of radionuclides and a high energy component which is the product of the interaction of cosmic rays with the earth's upper atmosphere. The radionuclides responsible for the low-energy photons exist in soil and rock and are carried into earth derived building materials such as concrete. Lead shielding or storage deep underground may be helpful, but for long-term raw stock storage, radiation will still be a factor. Upon exposure to ambient-background radiation, photographic materials can exhibit an increase in minimum density, a loss in contrast and speed in the toe, and an increase in granularity.

The change in film performance is determined by several factors, such as the film speed and length of time exposed to the radiation before the film is processed. A film with an Exposure Index (El) of 500 can exhibit about three times the change in performance as a film with an El of 125. While this effect on a film product isn't immediate, we still suggest exposing and processing the film soon after purchase. We recommend a period of no more than six months from the time of film purchase before exposure and processing, provided it has been kept under specified conditions. Films kept for extended periods beyond six months may be affected, especially the faster films, even if they have been frozen. The only way to determine the specific effect of ambient-background radiation is to make actual tests or measurements by placing a detector in the location where the film is stored. The most obvious clue is the observance of increased granularity, especially in the light areas of the scene."

Posted by: William | Wednesday, 08 June 2011 at 06:02 PM

Dear William,

I am well aware of this. Kodak standards for this, though, are extremely tight, far tighter than typical photographers need to worry about. Standards for motion picture work are especially tight, much more than for still photographers, because even minute changes in the stock behavior produce visual inconsistencies from reel to reel of footage.

Moderate-speed B&W still films do not become unusable, not even after decades. As I said in the article, I speak from first-hand experience; this is not a hypothetical approach that I'm suggesting.

Color film is, on average, more strongly affected by background radiation, but as I explain in the article, I doubt there's a good long-term strategy for that, anyway. But for what it's worth, I was successfully using decade-old ISO 100 color negative film up to the point at which I gave up film entirely. Indeed, I had to drop the EI by a stop, and increase development by about 15% to compensate, but the resulting negatives printed beautifully. Two examples:

http://ctein.com/Cumulus_Athabasca.jpg
http://ctein.com/Cumulus_Cirrus.jpg

In truth, there are other long-term changes that take place in emulsions, even when held at -15 to -20 C, besides radiation fogging. Things do not remain constant. Over time one has to tweak the processing to compensate for the gradual shift in film behavior. It is entirely doable.

No reason you should be excited by this all-- it's not a joyful opportunity. It's a survival strategy.

pax / Ctein

Posted by: ctein | Wednesday, 08 June 2011 at 07:24 PM

I'm a hand to mouth photographer. Buying my last 10-100' rolls of film was a strategized event: how am I going to get these and still have rent? Eat? I've already shrunk my stomach so that eating is a quaint idea, visited occasionally. Good thing it takes 2-6 weeks to get supplies from Vancouver: I order and then scurry around, robbing parking meters so I can pay The Man by the time the goods arrive. Exhibits? Every couple years I sell another kidney and buy some >fresh< paper, process, frame, hang, take down and store in another box. No whining here, photographing is what I want to do and will do, no matter what, but good grief, Privilege always speaks with so much flippancy, so much taken for granted; that there's thousands of dollars lying around to spend on 20 year stocks of supplies, extra freezers and instant on generators speaks to that. The rich get richer and the poor develop their film in coffee sludge (for the pleasant boke, no doubt).

Posted by: Fred Rosenberg | Wednesday, 08 June 2011 at 07:26 PM

Things don't work that way. I doubt any can do this thing to buy a lot of film only in case. You have to be economy wealthy too. Y take another approach. I'm trying to adapt of what happen. I used to print Forte Museum warm tone with Neutol WA. Really i can purchase substitutes for this thru Adox in Germany but what will be the cost. For my personal work and when the client have time I shoot film. I adapted to modernity developing with old developers I can find but I have experience using home made developers as the simple D 23, metol with sodium sulfite. That was the developer of Life Magazine so you can find it very useful. I will try to get until i can't, only that simple. I don't desesperate, i think there are a lot of enthusiasts that will maintain the production. If not, well, we have to use what we have, cell phones, whatever. By now, I had to prescind of the enlarge side of the analog method. Instead of a enlarger i use a scanner and print on fiber paper but in an inkjet printer. Equally, for me, is difficult too get fiber paper for the printer and is not cheap. About color I am really considering buy minilab chemicals to use my humble Jobo Duolab to develop my rolls, there are less places that develop 35mm and more less to develop 120 film. Film is different. The process is different. We must adapt to some changes of the market. But I am convinced that in the end we have film for several year ahead. Saludos

Posted by: Hernan Zenteno | Wednesday, 08 June 2011 at 07:36 PM

Dear Paul and Brian,

Unfortunately, color film processing is a LOT more difficult than B&W. Some people can learn to do it well; most can't. Whereas anyone who is not so much of a klutz that they aren't risking their life and limb every time they turn on the safelight is capable of learning how to decently process B&W film.

I've always done all my own film processing. I well know just how hard or easy various processes are to do.

Yes, dry chemistry is what I was thinking of when I was talking

Yes, dry chemistry is what I was thinking of when I was talking about a 5-year span. Although I have heard it suggested that liquid concentrates might be freezable and reconstitutable. If so, that would effectively arrest their aging. But I've never tried it, and there could be chemicals that come out of solution and will not redissolve upon melting. An experiment for someone who still has film chemistry to try.

pax / Ctein

Posted by: ctein | Wednesday, 08 June 2011 at 07:37 PM

Dear Mark,

You're right about what would happen if "everyone" did this. But human nature being what it is, you can bet case money that only a very small fraction of film users will ever do this.

If you think your favorite film will still be around for a while, but not indefinitely, you can ease into this. Buy the small freezer (or make room in your fridge). Every time you buy a roll of film to use, buy 2, 3 or 4 more to tuck in the freezer. Gradually, you'll build up a stockpile.

If you're really compulsive about it, you'll likely develop a first-in-first-out system, where after year or so you start using the oldest film in the freeze and adding the new film to the end of the queue.

~~~~~~~~

Dear Rick,

Well, personally, I am not worried in the least, as I gave up film a bit over a year ago.

I'm only saying that if someone is worried unto death, there is something they can do about it.

Most of us will just "work within the system."

~~~~~~~~

Dear Robert,

Have you actually tried the freezing-color-chemistry trick or personally know someone who has? As I said in another comment, it's an idea I've wondered about; I just don't know if it actually works.

pax / Ctein

Posted by: ctein | Wednesday, 08 June 2011 at 07:49 PM

I think, somewhere on planet Earth, film will still be made, both color and black and white, for some time to come. It will be like buying 19th C. photo processing equipment was (is?).
The same for processing and printing. It will be a craft. Probably black and white film and darkrooms will survive at a few photography programs at colleges and art schools. It will be the basic course for a while then it will be a kind of retro course. Kind of like taking a letterpress class for graphic design students today. (Sadly, many programs got rid of the type shop and Vandercook proof presses or let it go to disuse. But it had a comeback and is healthy and popular again.)
Think of the MAGIC that seeing an image made from just light and paper and developer will do for a person who was born after the digital camera and really only knew digital cameras? They will love it.
It will be around and be fun for students and those who want it.

Posted by: Joe | Wednesday, 08 June 2011 at 09:30 PM

"Securing Your Digital Photography Past" might just be the topic of TOP in 10 or 20 years too! Lest we all old salts forget those Popular Photography headlines that keep going and going and...

Posted by: waltere | Wednesday, 08 June 2011 at 09:39 PM

Spot on. The only thing I would add is that you don't need to hurry to do this. You have several years. Both to buy the cameras and get the film. B/w film is not disappearing anytime soon. But your favourite emulsion might disappear a lot sooner than some others. So it is good to keep the money ready and follow the news.

Posted by: Ilkka | Wednesday, 08 June 2011 at 09:58 PM

Perhaps after the post quoting Kodak on "Ambient Background Radiation" this comment, excepting the last sentence, is irrelevant. But reading the Kodak document is a hoot, for example: "Mastodon flesh has been preserved thousands of years in frozen Siberian tundra. "

Don't bet on cinema keeping film alive - it's going HD digital video.

If you want to follow the stockpile route, I humbly suggest stockpiling batteries if the camera requires one (hopefully only for the meter, not the shutter, as the camera chosen should be completely mechanical.) I've already had one camera become useless because batteries were no longer available. They did reappear after a few years, but by then the camera was long gone. Furthermore, I suggest buying 3 or 4 cameras and using all on a rotating basis. My experience with storing cameras (and other mechanical devices) or trying to use something that has been neglected for long periods is they are prone to lubrication problems (esp. shutter problems in cameras.) Stockpile extra lenses too, as they can degrade. Spreading the use among a number of cameras which are used often is probably better, plus service them regularly.
Oh, and store the cameras in something that doesn't outgas something bad for the camera. Be particularly careful of plastic bags or boxes.

Why not take a camera repair class so you can fix it yourself?

Have you considered that in the future you might not be allowed to dump all those chemicals into the drain? It is hazardous waste, isn't it?

PS: All this sounds ridiculous to me. If you want B/W photography that bad, why not get a 4/5 or 8/10 view camera and learn how to make your own plates and then learn how to make paper yourself.

Posted by: J Hayes | Wednesday, 08 June 2011 at 11:05 PM

Sorry, but when you need a survivalist's checklist to ensure the continuity of an activity, I give up. It brings to mind the passing of another great geological event, the populist era of vinyl replay (an asteroid hitting the Yucatan Peninsula, wasn't it?), leaving only those few, sad creatures in caves who spent their days and nights with tracking angle charts and freezers full of 180 gram pressings of (aieee!) Doobie Brothers and 'Stereo Fireworks' albums.

Posted by: Jim McDermott | Wednesday, 08 June 2011 at 11:40 PM

Re: cosmic rays

so one has to find an indiana jones-type lead lined refrigerator/freezer to store film?

Posted by: almostinfamous | Thursday, 09 June 2011 at 01:11 AM

What a depressing end-of-the world post.

Jeez, stock up a 20-year supply of B&W film. Who knows, you might be able to barter with it when the big SHTF event or Rapture comes.

Posted by: Chris | Thursday, 09 June 2011 at 03:28 AM

As long as people drink instant coffee, you can always make Caffenol ...

not sure why anyone would ever want to drink coffee, instant or ground. Makes a good developer though!

Posted by: Steve Smith | Thursday, 09 June 2011 at 03:39 AM

Lothar-Günther Buchheim tells in his book on his U-boat war photos how once his Contax became submerged in salt water. A good mechanic was on board the boat. He literally disassembled the camera, cleaned the parts and reassembled them. The camera worked flawlessly again. So the advice would be to buy a good non electronic camera. As long as there are good mechanics, it will last forever and endure incredible things.

Posted by: Anton Wilhelm Stolzing | Thursday, 09 June 2011 at 04:20 AM

When Ilford went into receivership I was very tempted to fill a freezer with HP5+ and PanF+. The laugh would have been on me, as Ilford are still in business and making those films.

Also, I've since found that the latent-image-keeping ability of PanF+ (which isn't great even when fresh) gets very much worse after the expiry date, even when frozen.

Posted by: BrianW | Thursday, 09 June 2011 at 04:31 AM

I'm reminded of Big Yellow Taxi, by Joni Mitchell. Something like:

"Don't it always go to show,

You don't always know what you've got 'til it's gone?"

Posted by: Andrew Lamb | Thursday, 09 June 2011 at 04:39 AM

Didn't know it was supposed to be difficult, so happily developed E6 films for years with very few mishaps (in the kitchen sink). Careful attention to time & temperature and use of water baths to maintain temperature is all that's required.

Printing, however may be another matter. I've only tried this once (Cibachrome), and let's just say I have not wanted to repeat the experience.

Posted by: Colin Work | Thursday, 09 June 2011 at 07:40 AM

JPG and RAW formats of today, we'll be able to open on computers forever... right?

Posted by: Dennis | Thursday, 09 June 2011 at 08:15 AM

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just out of curiosity, what masters degrees are we talking about?

and aren't all of the camera repairmen retiring? are new ones being trained to repair old cameras?

Posted by: raizans | Thursday, 09 June 2011 at 10:48 AM

"... not sure why anyone would ever want to drink coffee"

Now THAT'S a minority opinion! Considering coffee is one of the world's great trade staples and supports several national economies.

From Wikipedia: "'Green Unroasted' coffee is one of the most traded agricultural commodities in the world. [...] It is one of the most-consumed beverages in the world. [...] An important export commodity, coffee was the top agricultural export for twelve countries in 2004, and it was the world's seventh-largest legal agricultural export by value in 2005."

Mike

Posted by: Mike Johnston | Thursday, 09 June 2011 at 11:52 AM

Dear Dennis,

You've really jumped the topic tracks-- this is not about film vs digital. Digital's irrelevant to this column.

But since you asked: JPEGs will be viewable for many, many decades because tens of billions of important records held by all institutions are in JPEG form (and JPEG readers are easy to write and maintain).

Camera-specific RAW is more problematical.

pax / Ctein

Posted by: Ctein | Thursday, 09 June 2011 at 12:21 PM

Dear Fred,

Do not assume. In the past I've gone massively into debt, taking many years to pay off, to allow me to pursue the photography I wanted.

If you are indeed buying your film in 1000-foot lots, you have far more available funds than I have had for most of my life (and at any time when I was implementing the strategies outlined in this article).

Do not read flippancy or assumption into my column. I did not say this was fun nor easy. It is merely an answer for the folks who legitimately asked "What can I do if they stop making film?"

pax / Ctein

Posted by: ctein | Thursday, 09 June 2011 at 12:31 PM

You can do color with b&w film if you do color separations.. It's the original color process! You'll want 3x as many bodies, though ;)

Posted by: Andrew Molitor | Thursday, 09 June 2011 at 12:44 PM

Ctein,
Fair enough. Nothing personal, though. I was addressing an attitude.
"10 - 100' rolls".

Posted by: Fred Rosenberg | Thursday, 09 June 2011 at 04:54 PM

Mike

Is your mother's cousin free next Thursday?

Posted by: Steve Jacob | Thursday, 09 June 2011 at 05:41 PM

Dear Fred,

The attitude being addressed by my column is not one of wealth nor entitlement but devotion (quite possibly excessive) to one's art and craft.

It may be unwise, but it is in no way a vice.

pax / Ctein

Posted by: ctein | Thursday, 09 June 2011 at 10:41 PM

"... not sure why anyone would ever want to drink coffee"

Now THAT'S a minority opinion! Considering coffee is one of the world's great trade staples and supports several national economies.

I have lots of minority opinions. Perhaps using film is one of them!.... and I'm English so naturally, I'm a tea drinker!

Posted by: Steve Smith | Friday, 10 June 2011 at 02:35 AM

I am surprised that more people do not use bulk film. I long ago got fed up with having large numbers of used film cassettes to throw away and so I started buying my film in 30m bulk rolls and reloading my own cassettes.
It only takes about 15 minutes to load up ten cassettes (assuming you have a darkroom and the tools to hand) and that is enough for most people.
There is a considerable saving to be made, the cost of rolling your own is about half the cost of the same film in packets. You can freeze the film tins as they come sealed with tape. I would buy several types of film in bulk and load my own cassettes, these store very nicely 4 at a time in a 36 exp transparency box. I did this for years and not only saved a lot of money but I never, ever ran out of film!

You can also buy some types of printing paper in rolls and it is pretty easy to cut these up at home and box them up.

Posted by: andrew arthur | Friday, 10 June 2011 at 02:52 AM

What an enormous amount of rubbish. Film isn't disappearing any time soon.

Posted by: mani | Friday, 10 June 2011 at 02:58 AM

Thanks for a nice reply, Ctein. You are right, there is a scale of economy for most people who want to secure their products for the future, and which would probably benefit the market as sales in the short - medium term rise. In fact the best way forward is simply to use more of what you like within your budget. Film and paper prices have risen dramatically in the past 6-12 months, largely due to global economic conditions (and not just the rocketing price of silver) and this has stirred many people into a bit of a panic, such as looking for alternatives to Ilford because their prices increased the most. Like most things, however, (did you know a gallon of fuel in the UK is equivalent to over $9.00 US), we will have to adjust to this as I doubt it will significantly drop: it doesn't mean, in my estimation, that the film photo industry is necessarily on the edge of a cliff, if that were the case I suspect digital photo paper production would also be looking at a bleak market future, as affordability and perceived value pushes photo printing to the margins (if it isn't there already).
In short the most pressing cause for serious photographers, across the board is, "Vive la print",(forgive the vulgar parlance).
Regards.

Posted by: Mark Walker | Friday, 10 June 2011 at 04:21 AM

Doing E6 at home for my medium format/4x5/8x10.

Got 4 different types of Jobo machine (2 auto and 2 manual). Hence I guess I would be ok for my lifetime (finger cross) on the physical process.

But the chemisty is a bit of an issue. But when Kodak stop the 5L, my remaining few boxes of 5L get me very unease about keeping this process alive at home. You can get a much larger box. May go there but start worry. Not want too many times on getting those chemistry prime and in management control.

I do not like C41 result so far. But may have to move there and I think that should be ok for the next 2 decades.

Posted by: Dennis Ng | Friday, 10 June 2011 at 04:54 AM

Wouldn't buying a life-time supply of film now actually contribute to the demise? The companies are looking at streams of revenue and if you take your self out of the pool their stream goes down.

Posted by: dale | Friday, 10 June 2011 at 05:59 AM

Since cosmic rays pass through the core of the earth and out the other side, attempts to forestall damage by lead shielding your films are hopeless in the long haul.

In the shorter term, degradation resulting in increase granularity will be a problem confined to smaller formats like 35mm and 645.

4x5 may become the smallest easy size for boutique alternative-to-manufactured-film photography of the distant future--particularly for coating glass plates and whatnot.

Me, I'm still working off a few boxes of Quickload Astia 100F and Fujicolor Pro 160s. I've also got six Grafmatics for the Kodak sheet films that haven't been available in Readyload (Portra 160VC) or were never available as such (Ektar 100), since I got into LF 3 years ago.

Posted by: Ivan J. Eberle | Friday, 10 June 2011 at 11:23 AM

Didn't Ilford at one time state that planned on being "the last man standing" in B&W? When there is not enough demand for Kodak and the other big guys I suspect it will be a very nice niche for one of the current small guys.

Posted by: Dave Gess | Friday, 10 June 2011 at 11:23 AM

Kind of alarmist aren't we. Besides, Fox- Talbot and others figured it out without electricity. I'd say just buy a good book on alternative processes and you don't even need to buy photo print paper.

I think the two key things we need to worry about long term for film is water quality and the price of oil. Things might be available, but they may also be expensive; but when hasn't photography been expensive.

Posted by: James | Friday, 10 June 2011 at 12:06 PM

This is a issue that I have a keen interest in. I'm strickly a color photographer, mostly Velvia. While I have done a lot of B&W in the past, my real interest lies in color (I have zero interest in digital ... been there, bought the t-shirt, I just don't like the whole process).

I'm not too worried about color processing going away, E-6 is not difficult to reproduce; many third party companies have been producing E-6 kits for years. However, color film is a different question. Color film is much more difficult to make and requires a much greater investment in hardware and facilities. The Eastern European manufactures have jumped into the B&W film manufacturing world, but I don't they will have the resources for color film.

Currently, I'm stockpiling film, mostly Velvia. At my age, 20 years worth of film should do just fine.

Posted by: Robert | Friday, 10 June 2011 at 05:09 PM

Dear Mani,

I am most inclined to agree. But I didn't write this column for you, or for me, or even for James. I wrote it for people who are worried that their supply of film will disappear and don't know what to do about it. If either you or I had a crystal ball and we could absolutely assure them they had nothing to worry about, I would simply do that. Absent that, I provided them with a strategy that doesn't leave them purely at the mercy of the film manufacturers.

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Dear Dale,

Human nature and personal economics being what they are, I can give you as close to an absolute guarantee as I can about anything human that only a small percentage of film photographers will adopt my scheme. Only a fraction of those will really buy a "lifetime" supply, as opposed to increasingly stockpile and hoard, which would actually cause an insignificant, long-term uptick in film sales.

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Dear Ivan,

I don't think anyone was serious about a lead-lined vault–– it takes LOTS of lead! But just as a point of physics, only neutrinos pass all the way through the earth and out the other side. And the reason they do so is precisely because they hardly ever interact with ordinary matter, whether it be rock or film.

Muons are a bigger issue, because they do interact at a measurable rate with ordinary matter, but not so much that they can't penetrate many meters of shielding. They are not the major contributor to background radiation, though, at the Earth's surface. (But, they are the reason why neutrino observatories and other extremely sensitive particle detection experiments are buried under a mile or so of rock, in played-out mines.

pax \ Ctein
[Please excuse any word-salad. MacSpeech in training!]
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-- Ctein's Online Gallery http://ctein.com
-- Digital Restorations http://photo-repair.com
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Posted by: ctein | Friday, 10 June 2011 at 07:48 PM

Dear James,

Alarmist?

I don't see anything that could possibly be construed as alarmist about assuaging people's fears that they might not be able to practice their craft in the future. Whether or not they are justified in their fears is certainly something none of us know, and I didn't even try to go there.

All I did was give some of them a way to address the problem they see coming.

If you call that alarmist, then, to quote The Princess Bride,

"I do not think that word means what you think it means."

To the folks saying, "Hey if this worries you, just coat your own emulsions," I say, "C'mon, get real." It's not even close to practical for 99% of all photographers, and it doesn't address their concern about not being able to practice the specific craft they are currently practicing. It's essentially telling them to do something entirely different. Might as well just tell them to buy a digital camera; it's no less dismissive of their concerns.

I don't think it's my place to tell people what craft they should practice. Do you really think it's yours?

That's a rhetorical question.

pax / Ctein

Posted by: ctein | Monday, 13 June 2011 at 12:35 PM

@ Ctein: "Have you actually tried the freezing-color-chemistry trick or personally know someone who has?"

I haven't needed to yet as I still have an E6 lab within walking distance that is managing against all odds to keep the tanks rolling.

In my extensive research before posting my throwaway comment ["freexing e6 chemicals"+google] I did come across a thread on photo.net where one guy said he had tried it and it was fine, and another one was screaming at him that he was an idiotic wilful liar, or similar.

Now I search for it again, it appears there is no screaming man saying NO NO NO, so that must just be the background impression that reading photo.net forums has imprinted on my brain.

http://photo.net/film-and-processing-forum/00Er4r

Posted by: Robert P | Tuesday, 14 June 2011 at 12:25 PM

Dear Robert,

Thanks for that pointer!

Would note that this fellow was freezing working solutions, which take up a lot more volume than the pre-mix concentrates. Freezing the latter would be preferable; might not work for the reasons Ron Mowry brought up.

BTW, if Ron tells you something about photo or emulsion chemistry, you can usually take it to the bank. He's the guy *I* go to when I have a question about that stuff.

pax / Ctein

Posted by: ctein | Tuesday, 14 June 2011 at 07:23 PM

I am looking for photo labs that develop color K-14 side film's. Do you know of any? Thanks. Call: 503-581-4759. Or please E-mail me. Thanks.

Posted by: Dale Allison | Thursday, 16 June 2011 at 11:54 AM

The comments to this entry are closed.