



Elmstrata
STUDIO

Leah Markum

Layered strategies for marketing, writing, and
design for plant and land businesses

Portfolio

<https://leahmarkum.com/portfolio/>

Your message is too important to just sit and look pretty. I make designs connects with and nurtures your audience so everyone benefits and grows.

Mind, Not Art, Creates Designs

Creative marketing elevates a persuasive message that drives readers to support your business. The horticultural and outdoor industries also gain from this mindset.

I don't set edgy trends. I'm not trying to create the fanciest artwork, photos, or poetry in the industry. I use visuals and text that connect with your ideal audience and support mutual desires.

I'm an observer, thinker, and communicator with creative tools.

Strategy From Copywriting

That communication comes from a copywriting background. It taught me to study you, your industry, and your marketing issues. Just as well, I seek to understand your audience and their relevant problems. I fit those needs together to promise a quality solution in your message.

I don't want you to lose a tactful message because somewhere along the way didn't deliver. Design, photography, and writing need to all work together.

I want your audience to respond to you. If you have a solid offer, my job is to reveal how the offer with quality creative output.

Relationships and Communication

Our initial free consultation matters. We need to establish the vision of the marketing piece and see if we're a good fit without pressure.

Thank you for your time and consideration in looking at my portfolio. Choosing a suitable marketing creative is a vital experience and should be fruitful. Likewise, I look forward to your insights into your business. If you have questions, you can contact me.

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Trout Spoken Here.
Also Bass. Salmon. And Bonefish.

CRAZY FOR FLY-FISHING? SEND FOR YOUR
COMPLIMENTARY ISSUE OF FLY FISHERMAN —
THE BEST THERAPY FOR VICTIMS OF THE
"INCURABLE MADNESS" DESCRIBED BELOW.

*There's no obligation. But we'll throw in a
FREE CREEL if you accept our subscription
offer.*

Fellow Angler:
There's bait casting. There's spin fishing. And then there's fly fishing —
— what Robert Traver (author of *Anatomy of a Murder* but best known to
fishermen for his love affair with trout) called "one of the more amiable
forms of an incurable madness."
If the hairs on your neck tingle at the vision of a dusk-rising
brown gently finning as he looks upstream for *hors d'oeuvres*,
you've got the madness.
I know I do. I'm the Editor of FLY FISHERMAN. Like Robert Traver I fish
because ...
"... in a world where most men seem to spend their lives doing things they
hate, my fishing is at once an endless source of delight and an act of
rebellion ...
"... because trout do not lie or cheat and cannot be bought or bribed or
impressed by power, but respond only to quietude and humility and endless
patience ..."
I've got it bad; this amiable madness. And so do all of us here at FLY
FISHERMAN magazine.
When we're not hipdeep in New York's Beaverkill, Montana's Bighorn or
California's Hat Creek, we're planning our next trip — swapping stories
about our last one — or writing about it in FLY FISHERMAN.

Cordially,
John Randolph
John Randolph
P.S. We've ordered enough FREE CREELS — we think — to meet the
anticipated response. But they are likely to go fast, so why risk
waiting months while we re-order? Since your creel will be shipped
as soon as you pay for your subscription, why not get it immediately
by enclosing payment now?
JRM/jbb

TROUT SPOKEN HERE.
Also Bass. Salmon. And Bonefish.

Crazy for fly-fishing? Send for your complimentary issue of FLY
FISHERMAN — the best therapy for victims of the "incurable
madness" described below.

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subscription offer.*

*FREE!
Gift!*



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I've got it bad; this amiable madness. And so do all of us here
at FLY FISHERMAN magazine.

New York's Beaverkill, Montana's Bighorn or
California's Hat Creek — swapping stories
about our last one — or writing about it in FLY FISHERMAN.
is hatch along Michigan's Au Sable — skimming
lakes — casting to smallmouths in Virginia's
spring about it in Fly Fisherman.
in sports of the Light Cabin, Gray Ridge, Royal
King Cochran, Tan Caddis Pupa, Marston
Black-Voiced Dove.
ations of mealy nymphs, duns and spinners,
minnows ...
in ostrich, goose or peacock feathers; beaver,
badger, bear or antelope ...
id winding tackle — perfecting our whipfinch
pull-casting technique ...
e latest single-action reels, checking the "feel" of
in one for rolling our own) ...
in FLY FISHERMAN.
small army of field editors and streamside
how to tie the "perfect fly" you've dreamed of.
heads you to pristine lakes and crystal streams.
reports the latest in fly fishing gear and clothing
help you in selecting that ideal fly rod, reel,
fly need to improve your fishing.
reply card will bring your complimentary issue
no obligation to subscribe.
ic of anglers trading tips, techniques and
otes of misty lakes and mountain
out and rainbow-colored flies.
our generous reduced-rate subscription

ur invoice and mail it back without paying or
? Then mail the reply card today.

gph.

FREE CREELS — we think — to meet the anticipated
response. But they are likely to go fast, so why risk
waiting months while we re-order? Since your creel will be shipped
as soon as you pay for your subscription, why not get it immediately
by enclosing payment now?

Fly Fisherman's magazine subscription
sales letter, "Trout Spoken Here" is a
classic. It also ran decades ago, leaving
room for adapting different design
choices. Even from a successful letter,
there's always room to keep what
made it work but change some
elements for an "updated" look or
become suitable for online and print.

My objective was to:

1. Maintain a masculine, outdoorsy
look with bold headline and
subhead font
2. Pick a more readable script font for
the "handwritten" personalized
paragraph
3. Add a freemium graphic to attract
more attention to an immediate
benefit
4. Use a more standard body font for
familiarity and online readability
5. Adjust kerning for balanced
sentence line lengths, which inhibit
readability

Headline Typography

- Size and kerning distribute
headline and subtitle emphasis.
- Stencil typeface uses an old-
school, outdoorsy look to balance
an otherwise updated style.
- Bold typefaces grab attention.
- Bold evokes masculinity for the
mostly male audience.

Subtitle Typography

- Should grab attention, but not
steal from the headline.
- Complement either headline or
body text font-wise. Limit the
document to 2-3 typefaces.
- Center-aligned used to be more
common and works for shorter
and print subtitles.
- Left-align is more readable online
and for longer text.

Lead Typography

- Make an emotional appeal.
- May have a minor attention grab
like indentation or small caps.
- Body typeface is basic and helps
with readability to keep the focus
on the message.
- Make style choices for the
magazine name and dashes the
same throughout the body.

Offer and Personal Feel

- Handwritten style typography
feels like a personalized letter.
- Despite a handwritten style, the
text is still readable.
- Kerning and text box dimensions
help with the orphaned "offer".
- Graphics: the offer or promise—
the letter's purpose—relates to a
graphic for additional attention.

Freemium Graphic Insert

- Classical letter chose to stay
stream-lined for a focused read
and cheaper print job. A perfectly
justified creative choice.
- Other similar letters may include a
black-and-white image, so I added
a monochrome-looking
illustration to help with imagining
the potential of the offer.
- "FREE Gift!" sticker links the offer
to the image, and both words are
psychologically attractive.

Body Typography and Layout

- The original letter chose a
typewriter typeface. Very popular
with successful letters.
- Classical Pro: evokes a more
vintage, tactile, experiential feel.
- Classical Con: makes one wonder
if the letter was written in the 60s
and thus irrelevant.
- Modern: classy, but more familiar.



Creative Memo

Northwest Arkansas Outdoor Photography, a fictional company, needed ads to promote a spring field course. It was designed with a campaign in mind, including a blog, email, and landing page.

My objective with this ad was to:

- 1. Write copy that could apply for Google and social media ads.
- 2. Have copy that includes a catchy headline, critical date info, a call-to-action, and a link to learn more.
- 3. Have a design that would connect with nature lovers and photographers on social media.



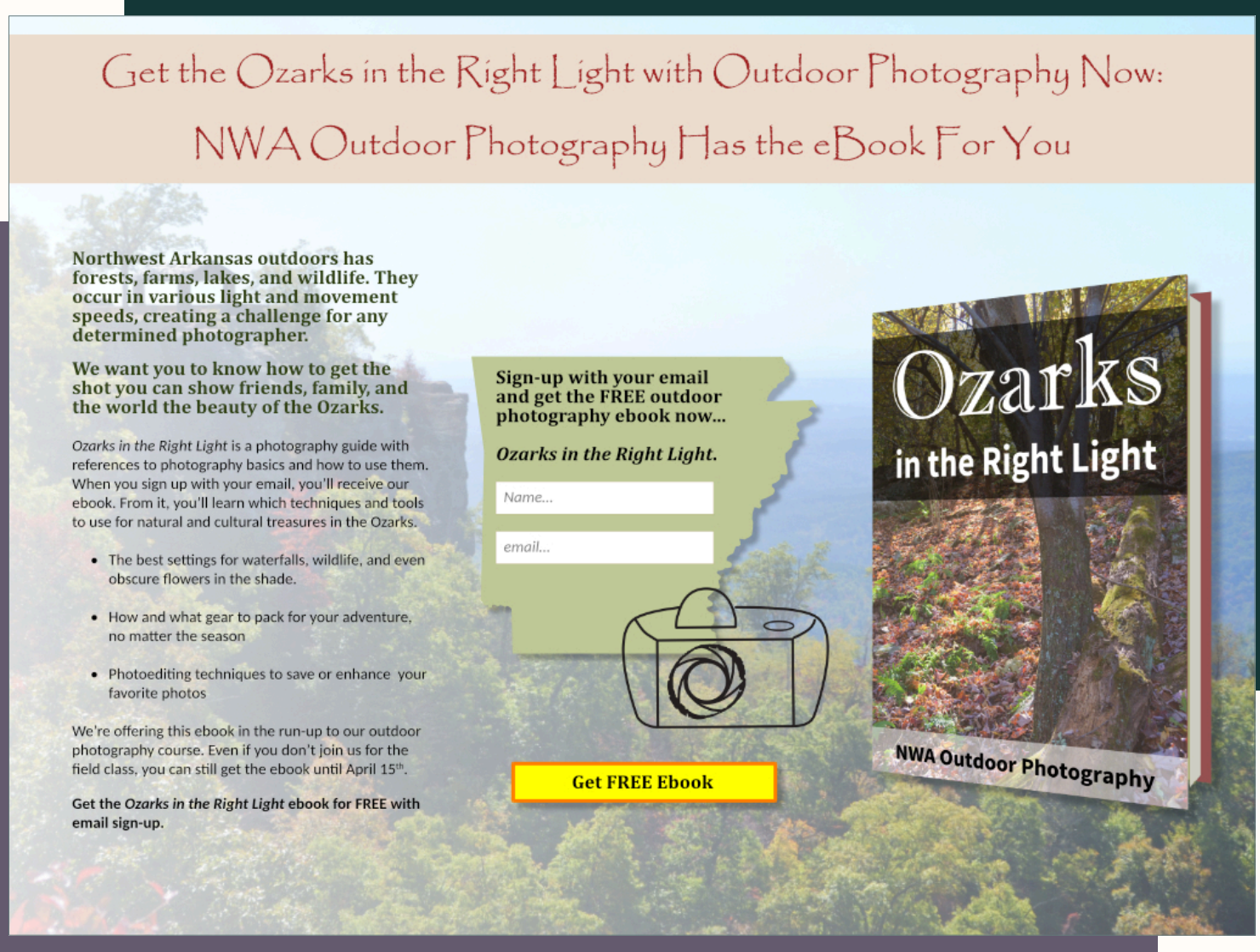
- 4. Nature designs tend to be green and have organic shapes, while photography favors minimalism and black and white.
- 5. Text alignment, color, and increased opacity of a non-photo background helped with readability and contrast.

Χρεατιωε Μεμο

Northwest Arkansas Outdoor Photography, a fictional company, needed ads to promote a spring field course. It was designed with a campaign in mind, including a blog, email, and landing page.

My objective with this landing page was to:

- 1. Write copy selling a free ebook to encourage email sign-ups.
- 2. Have copy focus on the book and how it helps nature photographers. Then have copy for the call-to-action.
- 3. Have a design that local photographers resonate with and recognize.
- 4. Many landing pages embrace desktop landscape dimensions with a photo backdrop. Further, I keep the colors and photos in harmony and on-brand.
- 5. Text and illustration alignment and color contrast get even emphasis. To help with text readability, the background has a graduated fade.



Creative Memo

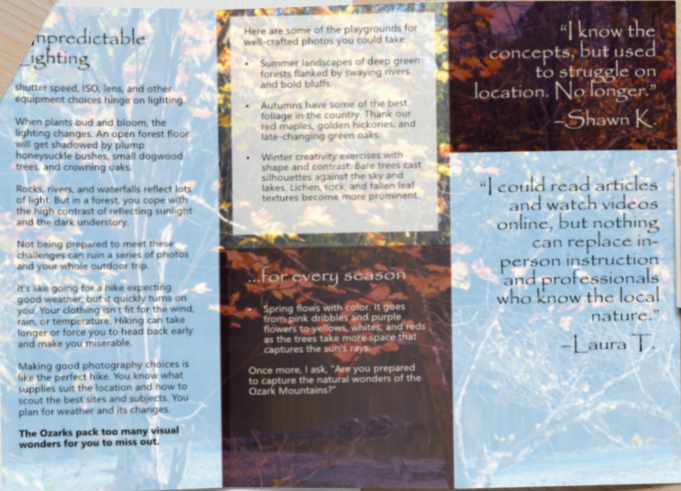
Northwest Arkansas Outdoor Photography, a fictional company, needed ads to promote a spring field course. It was designed with a campaign in mind, including a blog, email, and landing page.

My objective with this brochure and email:

- 1. Use copy from the campaign email as filler text. The following page's email copy drives interest in spring photography and how a course can help.
- 2. Have copy that includes headlines, pull quotes from customers, basic business info, and a call-to-action.
- 3. Have a design reflecting the company brand and attracts outdoor photographers.
- 4. The colors and photos revolve around local rivers.
- 5. Brochure dimensions fit a standard tri-fold, and design placement aligns with the correct brochure face.



Front



Back





Welcome to spring, <name>!

As new greenery emerges, so do outdoor photography opportunities. We can capture the transition from grays and browns to a rainbow from ground to canopy.

So, are you prepared to capture the natural wonders of the Ozark Mountains?

Spring is also a time for technical challenges. When the light changes, your camera setting needs to change. Aperture, shutter speed, ISO, lens, and other equipment choices hinge on lighting.

When plants bud and bloom, the lighting changes. An open forest floor will get shadowed by plump honeysuckle bushes, small dogwood trees, and crowning oaks.

Rocks, rivers, and waterfalls reflect lots of light. But in a forest, you have to cope with the high contrast of reflecting sunlight and the dark understory.

Not being prepared to meet these challenges can ruin a series of photos and your whole outdoor trip.

It's like going for a hike expecting good weather, but it quickly turns on you. Your clothing isn't fit for the wind, rain, or temperature. Hiking can take longer or force you to head back early and make you miserable.

Making good photography choices is like the perfect hike. You know what supplies suit the location and how to scout the best sites and subjects. You plan for weather and its changes.

The Ozarks pack too many visual wonders for you to miss out. Here are some of the playgrounds for well-crafted photos you could take:

- Summer landscapes of deep green forests flanked by swaying rivers and bold bluffs.
- Autumns have some of the best foliage in the country. Thank our red maples, golden hickories, and late-changing green oaks.
- Winter creativity exercises with shape and contrast. Bare trees cast silhouettes against the sky and lakes. Lichen, rock, and fallen leaf textures become more prominent.
- And spring flows with color. It goes from a dribble of pink and purple flowers to yellows, whites, and reds as the trees take more of the sun's rays.

Once more, I ask, "Are you prepared to capture the natural wonders of the Ozark Mountains?"

If not, let me bounce an idea off you...

I'm listening.

Your local outdoor photography pal and expert,

Tina Walker
Chief Photographer
NWA Outdoor Photography

P. S. With waterfalls, you want to be especially prepared because of the slower shutter speed to capture flow. Slow shutter speed needs a tripod and density filters to avoid overexposing the scene.

FOLLOW US:      

Don't miss a thing! Tina tina@nwaoutdoorphotography.com to your address book.

5 Tips to Take Sharp Photos in Forests



Feature photo and camera illustration courtesy of author.

How to Take Sharp, Colorful Photos in Low-Light Forests

By Leah Markum

It’s not entirely your fault.

Forests are challenging environments for photographers. Professionals take time with several shots of the same subject with different settings. They also carry tripods to overcome these challenges.

But you’re a hobbyist who wants to enjoy creating art and completing a hike with family and friends. So you want advice that’s fast and effective.

You want advice that you can use even on a hurried road trip through national parks with a group.

Creative Memo

Northwest Arkansas Outdoor Photography, a fictional company, needed ads to promote a spring field course. It was designed with a campaign in mind, including a blog, email, and landing page.

My objective with this editorial was to:

1. Write an SEO-friendly and reader-useful article.
2. Have the article easy to skim if read as a blog and relevant concept illustrations.
3. Have a print version that mimics a magazine layout baring accommodations to fit the portfolio and include a memo box.
4. Feature photo and a headline that stand out and portray the content. The photo retains the blog thumbnail to showcase the digital design, but it could be removed for print.
5. For textual contrast and easier print readability, the body text is serif and captions are sans italic.

The ultimate object here is to get more light. More light means less blur and more dynamics like color saturation and texture.

This advice follows a familiar format for photographers: rules for shutter speed, aperture, ISO, post-processing, and lens choice.

Shutter Speed

If you’re used to taking photos in automatic mode, your shutter speed suffers in forests.

Automatic mode, in a low-light environment, sacrifices your shutter speed.

You click your shutter, think you hear the action immediately, and move. Oops. Instead, the shutter took extra time to gather light and recorded your movement.

Even if you hold still, your arms and breathing shift the camera enough. You'll get that blurry photo you're trying NOT to take.

For this reason, your best bet in the forest is to shoot in shutter-priority mode. Your



Longer shutter speeds capture more movement by creating blur. (Photo courtesy of Flickr user Thomas James Caldwell.)

camera will shift other settings to accommodate your shutter.

If you choose to bring a tripod to overcome this issue, you still risk objects in the forest shifting on you. So you’d still have a blurry photo when you don’t want it.

Thus, make a point to shoot in shutter priority mode. It leverages your situation the most. It also might be the only adjustment you need.

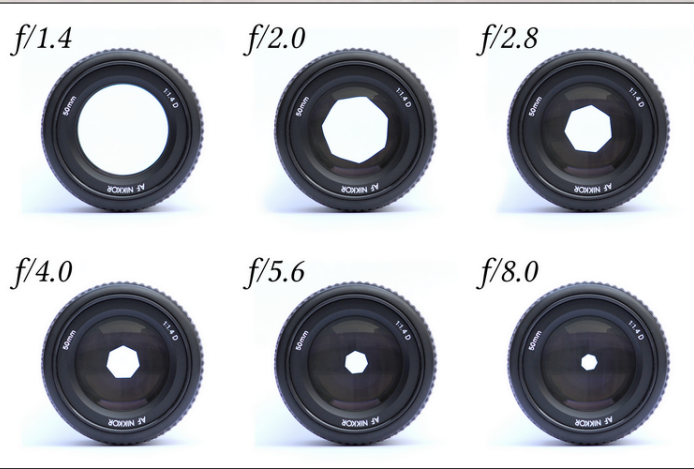
Aperture

Sometimes you want to use a different setting other than shutter priority.

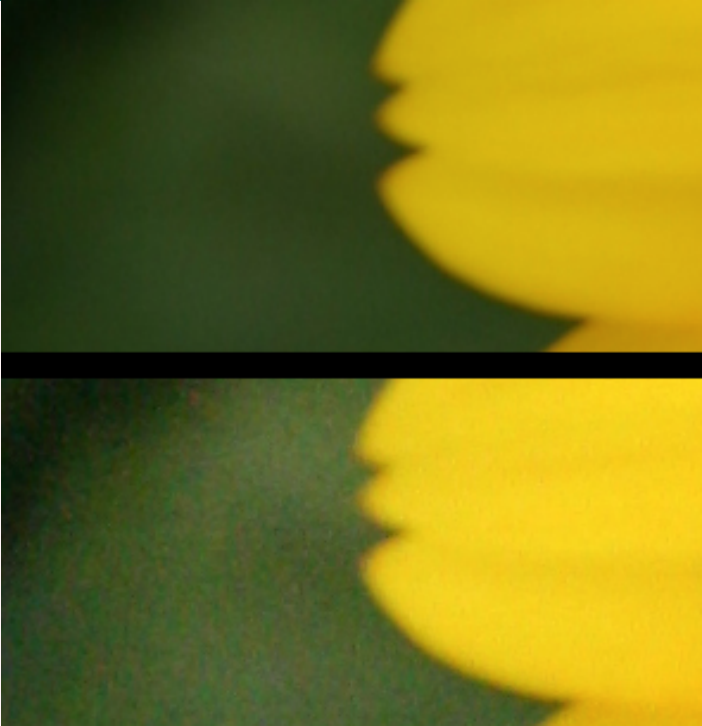
For instance, the background is a distraction if you want to take a close-up of fungi on the forest floor. Aperture will give you the depth of field you need to make the photo work.

If you like to take these types of photos, then aperture-priority mode is for you.

Aperture priority lets in more light over a wider area instead of time like with shutter speed.



Aperture is expressed in fractions where the larger fraction (smaller denominator) is a wider pupil to capture more light. (Photo courtesy of Wikimedia user Koeppik.)



Compare low ISO (top) and high ISO (bottom). Note the graininess in the bottom, but the brightness makes it more obvious. (Photo courtesy of Wikimedia user HuttyMcphoo.)

ISO

You might be thinking, “But high ISO adds graininess to photos. I don’t want that. That’s hardly better than blurriness.”

Yes and no. You want to adjust shutter speed and aperture to get the look you want. If that’s not enough, you should have a tripod or a good flash rig.

See how quickly that situation escalated? You need equipment if you can’t conquer low-light

with shutter speed and aperture. That extra equipment needs time to set up and weighs you down on a hike.

But the point of this discussion is to NOT overwhelm you with time and equipment. High ISO helps with this.

High ISO in daytime situations isn’t as sacrilegious as it might sound. There are two ways to notice high ISO grain.

- 1. You zoom in on the photo in editing software on your computer, or
- 2. You compare the same photo shot twice with widely different ISOs

Graininess even has an aesthetic that many photographers respect.

Why fuss over the stigma?

Amp up the ISO. In a forest setting, the graininess won’t kick in until 3200 depending on how shaded the scene is.

Post-Processing

Armed with Adobe Photoshop or Windows Photos for editing, you can make up for issues in the forest.

The principle here is less is more. Mild adjustments can help a lot. Major adjustments might look fine at first but can look awful when you see the image days later.

Before and after of a post-processed photo. (Photo courtesy of Flickr user McMac70.)



Better yet, keep original copies of all your photos. Then, make new copies that you edit. If those copies don’t work out, you still have the originals.

Also, the more times you save an image as a JPG, the more data gets lost. So if you keep coming back to edit that image, it’ll become grainy even if it was sharp initially.

Especially in the case of low-light photography, shoot your images in RAW if you can. JPGs condense—and thus lose—data. RAW retains all information. So when you go to your computer to edit, you can make more adjustments without overdoing them.

For instance, say I want to saturate the image more. I have one red flower. Subtle greens, grays, and browns surround the flower.

If I increase color saturation in JPG, that flower might lose information. It may become a single red mass instead of having its original texture or subtle variations of red. RAW would spare me that and pick up more data on darker areas.

Prime Lenses

Prime lenses have a secret talent. They make up for their locked focal length by being the best at letting in light.

If we compare lenses at the same settings, prime lenses get more details, contrast, and color.

Prime lens have one focus length. That allows more light than large zoom lenses. (Photo courtesy of Flickr user heipei.)



Prime lenses achieve this with streamlined machinery. You might like telephoto lenses like your 18-55 mm kit lens or your 55-200 mm standard zoom lens. But changing the focus means a lot of machinery has to move around.

Prime lenses locked at 50 mm, for example, lack those obstructions. That lack means more light, faster.

So if you don’t mind sacrificing zoom, prime lenses work wonderfully in low-light situations.

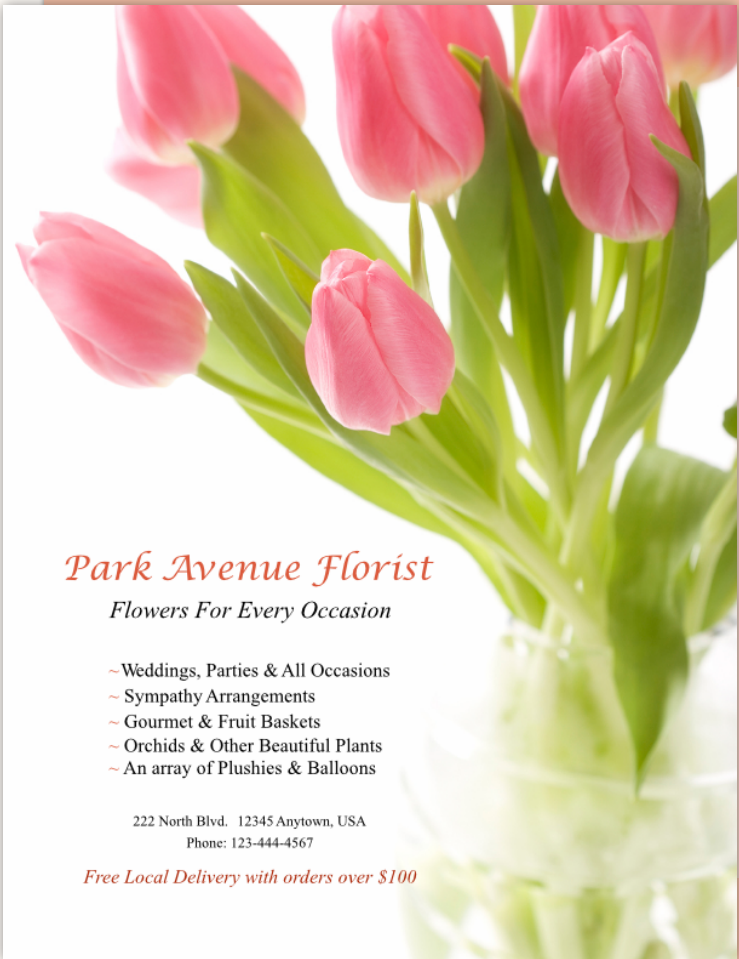
Conclusion

A few general adjustments to your camera settings can get the job done. The adjustments you choose will let in more light for the type of photos you like to take. That light helps the camera understand the shapes and colors in the scene.

And then you can move on. Get in some mileage. Spend time with your friends and family.

You don’t have to take forever getting the “perfect” settings. Or lug around a tripod or a large flash contraption like the professionals. They are in the forest for one reason—just the photos.

Different purposes mean different approaches. With the simple rules I shared with you, you can overcome your photography problems in forests while also getting on with your day.



Graphic dominant

Creative Memo

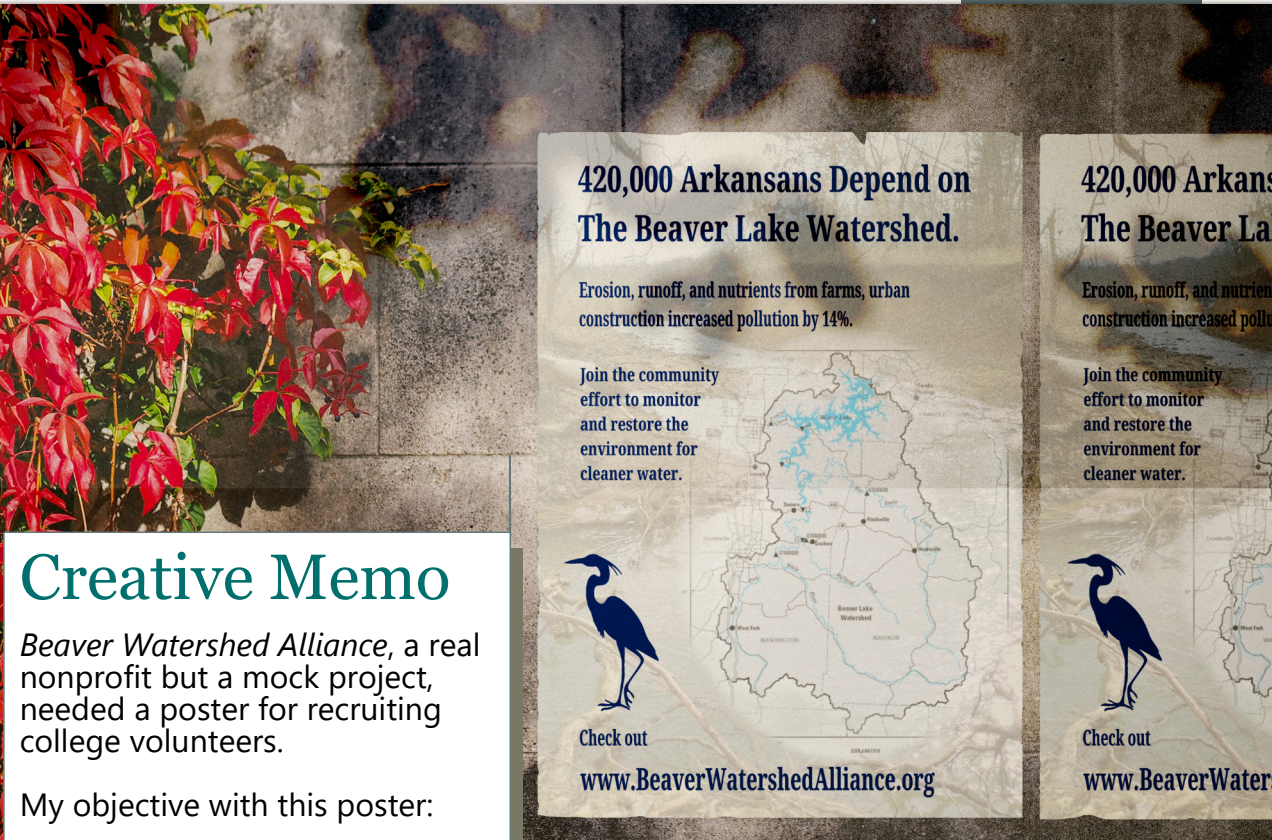
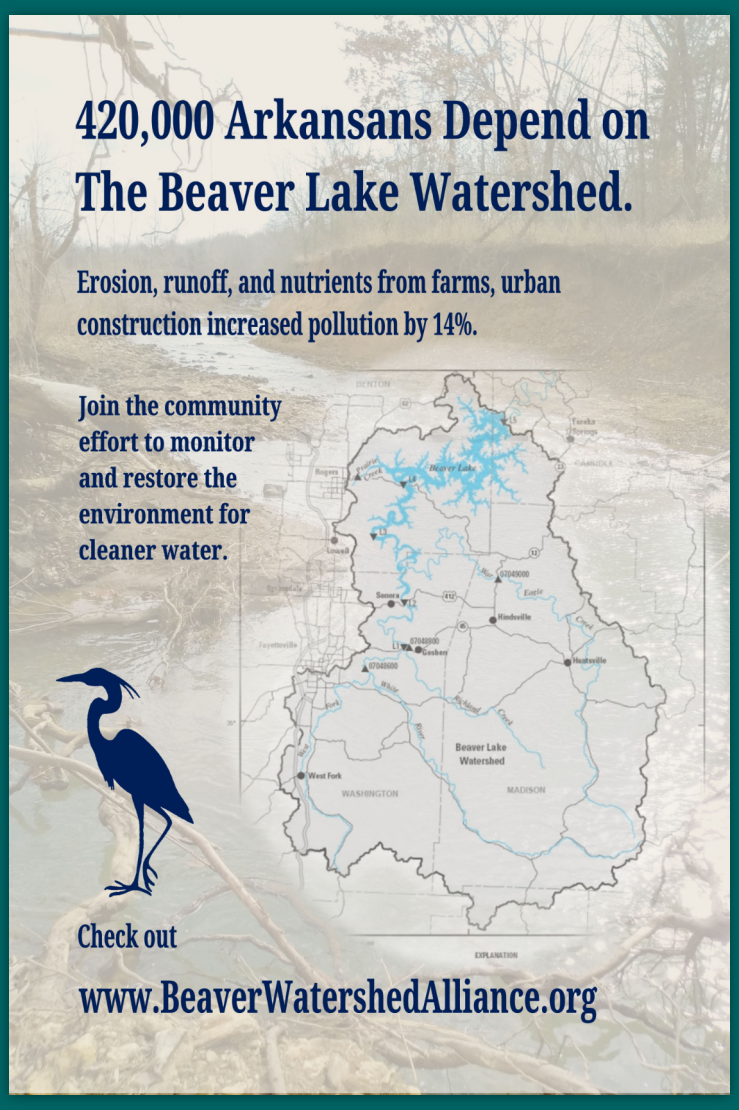
Park Avenue Florist, a fictional company, needed sell sheets for a general product and service promotion.

My objective with this flyer was to:

1. Present copy in two formats that has a gentle, elegant style by still easy to read and complements the graphic.
2. Have copy that includes a company name, tagline, products and services, contact info, and promoted deal.
3. Use a given tulip photo. It has a balance of a graceful and casual nature, thus informing the font choice.
4. Color was pulled from the photo. A peach color from the base of the flowers avoids favoring the pink or the green too much.
5. In one version, the flower calls the viewer. The other frames and pulls the text forward.



Text dominant



Creative Memo

Beaver Watershed Alliance, a real nonprofit but a mock project, needed a poster for recruiting college volunteers.

My objective with this poster:

1. Present informative copy that's simple, practical, but emotive enough to encourage a college audience to volunteer. Include a call-to-action and the website.
2. Select an image from the area that illustrates erosion and the winter time frame of the volunteer season. Neutral-color filters keeps it and the overlaying text visible.
3. Use a map of the watershed to show scope and visualize the factoids. Also use the organizations go-to illustration of a great blue heron.
4. Find a way to arrange the assets so that the factoid attracts, and everything else is in position and proportion to flow to the call-to-action.
5. Use colors that work for the message and for visibility. Most volunteer work is in the winter, so a dull neutral complements a deep "watery" blue.



HI-TEC Men's Ravus Vent Mid Cut DRI-TEC Waterproof Boots - Brown

Product Details

Whether for rugged work or hiking, HI-TEC Ravus Vent boots can bear the brunt. They have a waterproof layer that prevents leaks from puddle traverses. Another layer of mesh lets your feet breathe and maintain a comfortable temperature. The structure is firm enough to protect while you construct, yet cushioned enough to help you get through a rough day.

Features

- **Upper:** Suede and synthetic
- **Underlay:** Breathable mesh
- **Waterproofing:** DRI-TEC member
- **Lining:** Nylon mesh
- **Insole:** Removable EVA, foam
- **Mid-sole:** EVA
- **Out-sole:** Multi-directional, rubber
- **Tongue:** Gusseted
- **Closure style:** Lace-up with pull loop

Specifications

Advanced Technology	Omni Grip, OrthoLite®
Boot Height (cm)	15 cm
Product Weight (g)	.560 g
Insulation Weight (g)	0 g
Minimum Temperature (°C)	0 °C

Resources

[View our return policy](#)

Product descriptions and photos need to contain as many technical, informative details as possible yet engage the viewer.

My objective was to:

1. Write copy that had some technical points but positioned them in real-world settings to visualize their value.
2. Have a cumulative list of specs with a reasonable organization and format.
3. Decide on a shot list, and after the shoot, decide which types are best to narrow down to.
4. Include three types of images: the full product studio shot, a collage of detail shots, and an “in person” shot.
5. Edits of the images were limited to neutralizing the light temperature and intensity (so that white is white).





Home and garden companies, wedding venues, nonprofits, and many others use garden photography in their marketing materials. Gardens showcase the overlap of the human world and nature and how the aesthetic harmonizes.

My objective was to:

1. Compose photos in that include close-ups for abstract use and medium distance for settings.
2. Get a range of colors, seasons, weather, and props.
3. Minimize distracting elements. Some can be edited out, but it's always best to get the shot right.
4. If "unedited" are preferred, the only edits would include issues from the shot that distorted reality, such as tilting or exposure.
5. Save originals for occasions when no editing is preferred. As needed, some slight edits retain honesty but help the image stand out.



Karst geologist tells science behind CAFO farming on the Buffalo National River

By: Leah Markum

What is controversy? In some cases, people define controversy as a dispute involving between emotional opinions entwined with emotions instead of and facts. In the case of C&H Hog Farm, a concentrated swine facility along a tributary four to five miles from the protected Buffalo National River, emotions may be a source of dispute.

John Van Brahana, professor emeritus from the department of geosciences and the environmental dynamics program of University of Arkansas, proposed those on both sides of the controversy come together and discuss facts. Although technically retired, Brahana gathered student volunteers and conducted research at studied the disputed scene of the debate the land and rivers near the Mount Judea community deep in the Arkansas Ozark Mountains. He presented his research and current understanding of the situation at a public seminar hosted by The Ozark Society Highlands Chapter in late September.

"Is this really a problem? Are we overreacting? Is there an overreaction?" Brahana asked. "We need to get beyond that emotion. We need to get beyond that human component. We need to get facts."

The issue started with Jason Henson and his cousins Richard and Phillip Campbell, all owners of C&H Hog Farm. They applied for and received the first state-issued concentrated animal feeding operation, or CAFO, permit back in March. The permit allows the farm to house over 6,500 hogs, almost all of which will be sows and piglets under three weeks of age.

Since then, many Mount Judea residents said they were upset for not being notified wished authorities told them about the permit. Different environmental groups, including The Ozark Society, Arkansas Canoe Club, Buffalo River Watershed Alliance and National Parks Conservation Association, united. In June, the environmental groups sued Small Business Administration and Farm Services Agency, the two federal agencies that supported the loan to build the CAFO.

In short, C&H Hog Farm followed the necessary legal protocol to start a CAFO, but environmental groups fear contamination of a federally protected river. No one knows how much the CAFO will impact the environment. Without objective research and discussing research results, the people may dismiss conflict may be considered emotional.

"People are clamoring for things, but they aren't working together," Brahana said. "We need to sit around the table, and everybody needs to talk about what's going on."

-MORE-

Passive voice, wordiness

Unknown Author
04/24/2020 15:36

Wordiness.

Unknown Author
04/24/2020 18:06

Wordiness "Mount Judea" is the town's name. I think I was unsure when I wrote this. "Community" is unnecessary.

Unknown Author
04/24/2020 18:12

Wordiness. "Current" pointless and implied.

Unknown Author
04/24/2020 18:07

Passive voice. Wordiness.

Unknown Author
04/24/2020 18:10

Passive voice.

Unknown Author
04/24/2020 15:47

Passive voice.

Unknown Author
04/24/2020 18:17

CAFO geology

As a karst geologist, or someone who studies solution-dissolved rock formations, Brahana got permission from other Mount Judea landowners to study cave features, water flow and how a CAFO might affect nearby rivers, including the Buffalo. The public knows the Ozarks are known for their caves, and when there are caves there are mean cracks in the underlying rock formations. These cracks would make groundwater and river contamination, from the CAFO or other farms and industries, easier than previously thought.

"Everything we do comes at a cost," Brahana said. "We are a populated world. There is not much space left."

Many concerns stem from a type-of worst case scenario. C&H Hog Farm intends to spread the farm's waste among 17 nearby fields, seven of which are considered to local say flood occasionally. There is also shallow 6 to 8 inches of topsoil, a relatively shallow depth, which leads to higher amounts of runoff.

"When the flow is up, these streams have steep gradients, and they can erode," Brahana said. "They can carry tremendous mass."

Environmental groups are also dissatisfied with criticize the Arkansas Department of Environmental Quality (ADEQ), the organization that authorized the original environmental assessment and approved the CAFO permit. Brahana said ADEQ focuses on surface water, and the they could only means of assessing test groundwater was testing through wells.

Brahana said wells have to be lucky need luck to strike karst. Streams cover more area and would be more accurate to sample provide more accurate data, whereas wells collect water from a point source, meaning they sample only the water that happens to be directly under it. Caves are not distributed unevenly across the subterranean world, but they clump and meander depending on geology.

With The concept of karst, is water travels the path of least resistance. Wherep there are water finds cracks or pores in rocks or porous rocks, especially such as limestone, water dissolves the rock and creates underground channels and chambers. This water can move fast and carry lots of contaminants, but because it is underground, few understand it the underground impact in an area discharging 2 million gallons of manure and swine waste.

"Groundwater moves as quickly as water in a stream, except that exact location of pathways is very difficult to predict," Brahana previously told *Arkansas Times* about karst in the area. "The high velocity of the water in conduits is capable of transporting sediment, organic matter, fecal waste and dissolved solids from the CAFO."

-MORE-

Passive voice. Wordiness.

Unknown Author
04/24/2020 15:49

Wordiness.

Unknown Author
04/24/2020 18:19

Passive voice.

Unknown Author
04/24/2020 15:51

Passive voice. Wordiness.

Unknown Author
04/24/2020 15:55

Passive voice.

Unknown Author
04/24/2020 15:58

Passive voice.

Unknown Author
04/24/2020 18:20

Passive voice.

Unknown Author
04/24/2020 16:00

Passive voice.

Unknown Author
04/24/2020 18:22

Wordiness.

Unknown Author
04/24/2020 16:03

Passive voice. Negative.

Unknown Author
04/24/2020 16:07

Passive voice. Wordiness.

Unknown Author
04/24/2020 18:23

Passive voice. Clarity

Unknown Author

CAFO geology

Contamination concerns are not limited to go beyond ecosystem impacts. Water carrying waste from the farm will also carry bacteria. This can happen not just from floods but from waste ponds. Brahana said the area has lots of thick clay above rock fractures. The farmers store waste stored in concrete-fortified basins, adding that weight to the clay may weigh too much for the rock below further break the rock, resulting in sinkholes. Sinkholes offer easy access to cave systems as well as surface rivers.

"Those microbes cause more health related problems than all other groundwater contaminants combined," Brahana told *Arkansas Times*.

Other health concerns involve smell. The CAFO, located near a school, currently has over 2,000 sows and the smell some days wafts over Mount Judea. Parents worry about their children's health, even though None of the local farm workers have not been known to get have said they experienced sickness from the smell. However, CAFOs established in Colorado do not have this issue.

"I have been in CAFOs," Brahana said. "You couldn't smell anything until you were inside. The water is pristine. It can be done. The fact of the matter is we need to ask questions and consider everyone."

Brahana said CAFOs are provide a "good deal for us as consumers" because having so many animals together cuts production costs, leading to cheaper groceries. He said swine waste makes a "wonderful fertilizer. It can turn grass green," but however, he fields in the Mount Judea area, tested by University of Arkansas soil scientists tested the field in the Mount Judea area, and the CAFO workers have are already saturated the soil with phosphorus. If farmers spread more fertilizer, most little of the nutrients will won't get absorbed and will eventually run off.

Brahana's research, still underway actively researching, has yielded found abnormally large concentrations of nitrate, chlorine and calcium in the groundwater. Groundwater has naturally consistent in Scientists easily find abnormalities because mineral levels naturally stay consistent in groundwater, so abnormalities are easy to discern. Although microbial samples cannot be tested for source in terms of species, Brahana also he water has large numbers of enough *E. coli* enough to make one people sick from drinking the water.

"Hydrogeology is risky," Brahana said. "I suspect the water quality issue is poised and right and waiting. As soon as they start things it will start to show up. There will be contamination."

-MORE-

Passive voice. Negative.

Unknown Author
04/24/2020 16:35

Clarity.

Unknown Author
04/24/2020 18:27

Passive voice. Negative.

Unknown Author
04/24/2020 16:46

Negative, but either confusing (did I mis-type and mean Colorado DID have health problems?) or pointless

Unknown Author
04/24/2020 16:54

Passive voice.

Unknown Author
04/24/2020 16:58

Passive voice.

Unknown Author
04/24/2020 16:58

Passive voice.

Unknown Author
04/24/2020 17:06

Negative. Missing comma.

Unknown Author
04/24/2020 17:07

Clarity. Research doesn't "yield" physical compounds. Dangling modifier.

Unknown Author
04/24/2020 17:49

Passive voice.

Unknown Author
04/24/2020 17:50

Passive voice, negative, and clarity. I'm not sure what I originally meant by "tested for source in terms of

CAFO Geology

Regardless of research results, however, environmental groups may continue their lawsuit against the CAFO permit. Mount Judea residents and other Arkansans alike may continue to fuel the argument, and C&H Hog Farm may continue to try to make profits. Controversies are built on strong, opposing beliefs. Sometimes they change with new knowledge, sometimes they do not.

"Science is not a zero role, but it is not the most important by any stretch of the imagination. That's the way it is in today's society," Brahana said.

###

Wordiness. Pointless to say "regardless" and then "however".

Unknown Author
04/24/2020 18:01

Clarity. Mount Judea residents are also Arkansans. Wordiness. No need for "alike".

Unknown Author
04/24/2020 18:02

Creative Memo

A spec article for University of Arkansas publications needed editing. I wrote it at the end of my first degree and edited it at the beginning of the second—goes to show how much a professional writing class did for me.

My objective was to:

1. Do several rounds of copyediting, focusing on one category of errors at a time, like passive voice, wordiness, and lack of clarity.
2. Have rounds dedicated to developmental editing such as evaluating for flow, clear ideas, and delivering a point.
3. Final rounds went to proofreading—spotting typos, punctuation, and spelling.
4. Use a track changes function.
5. Created a style guide along the way so that preferential choices would be consistent.



Elmstrata
STUDIO

Leah Markum

Layered strategies for marketing, writing, and
design for plant and land businesses

<https://leahmarkum.com/portfolio/>