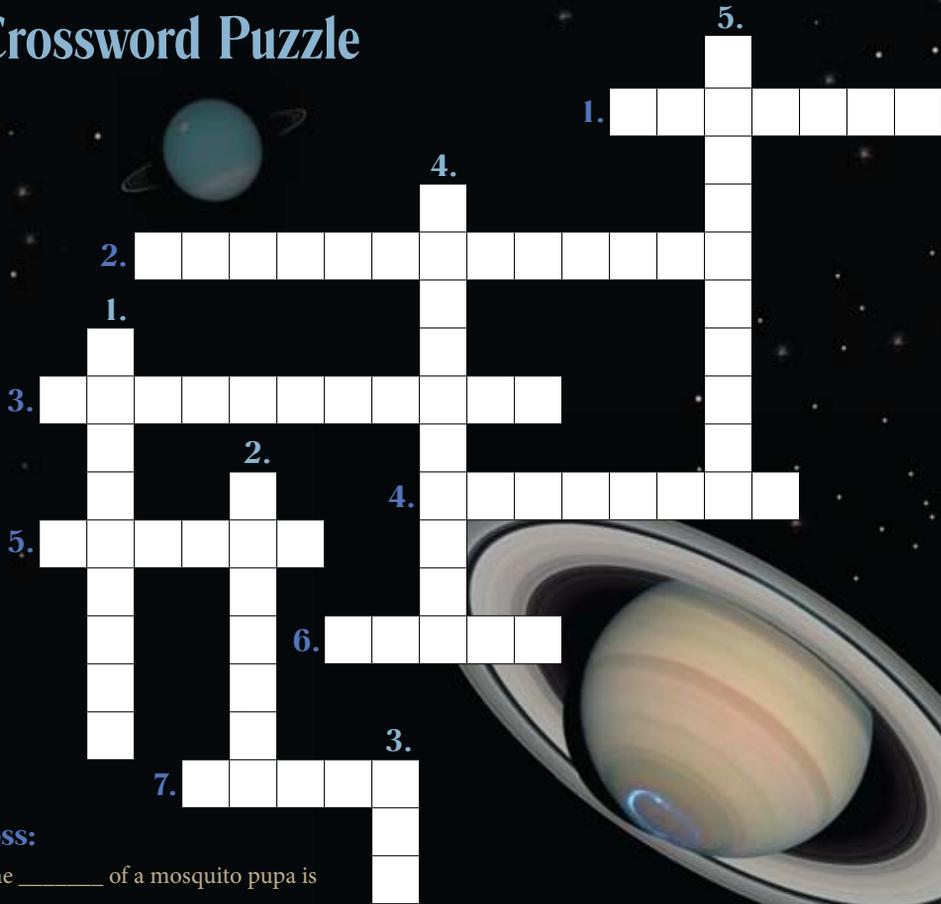




# Crossword Puzzle



## Across:

1. The \_\_\_\_\_ of a mosquito pupa is its hard outer covering.
2. The four-stage change in the life of a butterfly is called \_\_\_\_\_.
3. Most weather takes place in the atmospheric layer called the \_\_\_\_\_.
4. The Dutch word for walking on the sea floor is \_\_\_\_\_.
5. A piece of land reclaimed from the sea is a \_\_\_\_\_.
6. After nitrogen and oxygen, the next most common gas in the atmosphere is \_\_\_\_\_.
7. The planet \_\_\_\_\_ is called the "Earth's twin" and the "morning star."

## Down:

1. Mars looks red because its surface contains \_\_\_\_\_.
2. The atmosphere on Uranus smells like rotting animals because of the \_\_\_\_\_ gas in it.
3. About 99% of the mass in the solar system is found in the \_\_\_\_\_.
4. A killdeer tries to lead an enemy away from its nest by pretending to have a \_\_\_\_\_.
5. The blanket of air around the earth is the \_\_\_\_\_.

# For You to Research

1. What is a meteoroid called:
  - a. When it burns in the earth's atmosphere?
  - b. If it strikes the earth's surface?
2. How were the first rings of Uranus discovered in 1977?
3. Besides the dogwood, what are some other common plants that have large, showy bracts often thought of as petals?
4. Why do killdeer turn their eggs so that the pointed ends are toward the center of the nest?

# True or False

*Study Guide*

1. The atmosphere is 99% nitrogen and oxygen. \_\_\_\_\_
2. Mosquitoes can bite as soon as they hatch from their eggs. \_\_\_\_\_
3. A bittern improves its camouflage by turning its bill downward. \_\_\_\_\_
4. The diameter of Betelgeuse is larger than the Earth's orbit. \_\_\_\_\_
5. It takes just an instant for light to travel from the sun to the earth. \_\_\_\_\_

## THE Photo CRITIQUE

by Kevin Shank

Sometimes in photography, an opportunity comes and goes very quickly. When I spotted this scarlet tanager, immediately I liked the composition. Distant leaves provided a soft green background, the foreground branch was an exceptional design, and several tulip poplar blossoms accented the composition.

The bird was flighty and did not stay at any one spot very long. I took photos about as fast as I could click the shutter. Out of the eleven photos in just about as many seconds, five were taken with the bird perched here. None of the eleven photos successfully captured sharp focus on the bird, and therefore, all are marginal in quality. What should I have done differently to increase my chances of a successful photo?

Upon seeing this extraordinary opportunity, I shot

as many photos as I could, as rapidly as I could. I was focusing on the leaves since they were stationary and the bird was flighty. This would have worked if the bird had been at the same distance from the camera as the leaves. Back home at the computer, I can see the bird was slightly closer than the leaves, and therefore, out of focus. And, it is the most bird's eye that is the most

...continued on page 4



important element to have in focus in the photo.

While both shooting many photos and focusing on

the leaves may have had merit, they did not guarantee a successful image. I believe it would have been better to shoot a couple “security” shots first, and then concentrated on sharp focus of the bird. The bird may have flown before this came together; however, if he didn't, a more successful photo may have been the result. ◀

## Tiger Lily

Amanda Klejeski, 14  
Pinewood, MN

*What a beautiful photo! I like the composition. The flower “moves” into this photograph. The close-up anthers are in sharp focus. This is kind of like an eye on a bird or animal. If the eye is in focus, the rest does not have to be. For the most part, the flower is soft on focus, but that can be okay. By being soft, it really makes the anthers pop out.*

*Just a tip for whatever it is worth. When I am set up on a flower as you were with this one, I often shoot a lot of photos and change the f/stop on the lens with each one. While this is not an in-depth study on f/stops, the more open the lens, the more shallow the depth-of-field. Depth-of-field refers to the amount that is in focus. This flower has shallow depth-of-field, as only the anthers are in sharp focus, and the petal that is a similar distance from the camera. The distant objects are soft. As the lens is “stopped down,” meaning making the aperture smaller,*



*the depth-of-field, or the amount in focus, increases.*

*By shooting a variety of f/stops, I can later choose the flower that has the flavor I most prefer. Lots of depth-of-field is not always desirable, since the sharper the background is, the “busier” the photo becomes. Maybe you shot a variety and this was your choice—it is very nice.*

—Nature Friend



## Cardinal Nest in Spruce

*We found this cardinal nest in a Black Hills spruce tree by Mother's flower garden. We enjoyed watching them grow.*

Amanda Marie Sarna, 14, Minnetonka, MN

*Watching birds grow IS fun. You have a nice, sharp photo of the young cardinals. I see you have used a flash to illuminate the birds. That is good in that you get good lighting in a place that was likely heavily shaded. One thing you might consider when using a flash, is*

to experiment with reduced power. You may find that a reduced power setting illuminates nicely while retaining a bit more detail in the light areas of the photo. Gently pulling back the little twigs that catch the flashed light (such as the green one on the left) can help too. You were right to not cut the twigs out of the way, as that could expose the nest to predators.

—Nature Friend



### Bracket Fungus

Grace Barns, 14  
Kent, England

*The first thing that jumps out at me is that you have an eye for “seeing” a photographic opportunity. I like patterns in nature, and the pattern of this fungus repeating throughout this photo provides beautiful rhythm.*

*This is very well done. The slightly-lower-than-eye-level perspective is very attractive too.*

*One observation—I try to avoid cropping a photo right at a subject, as seen along the left edge of this photo. The right side is cropped tighter, so that does not stand out to me as much as the left side. My first choice might be to shoot the entire fungus, and let final cropping be done in the computer.*

*Overall, you can see the fungus is a crescent shape. Starting at the base, the fungus moves upward to the right, and then to the left. Our eyes like to see objects “moving” into photos. Since this*



*fungus is doing that from the right side, the right side can be cropped closer to the fungus (or in the fungus) than the left side and still look balanced. This assumes there is a little margin on the left side for the fungus to be “moving” into.*

*To help us visualize this better, I’ve added a little margin along the left side.*

—Nature Friend

### Fox Squirrel

Joshua Shank, 11, Dayton, VA

*It looks like you have a unique subject to photograph, a piebald fox squirrel. And he is sitting on an artsy stump too. I don’t know specifically what camera you have, but I do know it is a small point-and-shoot. Your challenge is to get close for a good shot. Let me tell you how I once did this.*



*First, I chose an artsy stump among green vegetation that would be illuminated by the first rays of the early morning sun. I chose this because I wanted warm light and a glint in the eye. Next, I placed sunflower seeds inside*

*the hollow of the stump, and about six feet away, I set up a photo blind. Before daylight the next morning, I slipped into the blind. It was quite easy to get a number of close-up photos of the squirrel. While you may not have a photo blind, you can make a teepee of sticks and put a blanket around it. You will want a stool to sit on, a tripod to hold the camera steady, a small opening for the camera to shoot through, and a bucket of patience.*

—Nature Friend



### Honey Bee

*I was lying on my stomach in my lawn with a little digital camera, trying to get a shot of a honey bee on a trefoil flower. I had already taken a lot of blurry pictures and was*

*about to give up when suddenly my hard work paid off.*

Jacob Lauser, 12, Washougal, WA

*Your work did pay off. I like the composition. Your photo is eye-to-eye with a tiny bee on a small flower, and that gives the photo a lot of “punch.” You have nice, “rule-of-thirds” composition. Lying on the ground and getting a lot of blurry pictures shows creativity and determination, and these paid off. Good job.*

—Nature Friend

**We invite you to send your best photos to The Photo Critique, 4253 Woodcock Lane, Dayton, VA 22821, or e-mail to [photocritique@naturefriendmagazine.com](mailto:photocritique@naturefriendmagazine.com). While we can’t publish all submissions, we can only consider those that you submit. We also invite your photo tips.**



## The Joys of Nature Writing

by Judy Kauffman

I wasn't always as keenly interested in nature as I am now...until I began writing about it. There is something about writing actual nature experiences that whets your appetite for more. Now you begin noticing nature in a new way. You go walking to find new discoveries. You carry binoculars. And then...what a joy when you are able to identify

that bird through that looking glass as a magnolia warbler!

Writers are really artists...artists that paint with words. Nature can supply you with many visual word pictures, and you will want to find ways to use as many "choice" words as possible. Artists revel in many shades and colors. They dip one side of their brush into one color, and the other side of the brush into another shade, then work on their paintings. In the same way, a writer finds and uses many shades of words and expressions in his writings. A thesaurus is an invaluable tool. For example...

I saw pretty white flowers growing along the path while walking through the woods.

First of all, what were those pretty white flowers? Use your nature guide if you don't know. Think of more expressive words to use. Use that thesaurus to help you. Rework that sentence into a descriptive paragraph.

While walking along the woodland path this morning, I suddenly spotted flowers that looked almost tropical. But immediately I recognized them as white lady's-slippers. Those bell-like slippers rose shining above the green foliage—so



pure, so lovely. A small spruce stood protectively behind them. I paused before them, and in audible exclamations of delight, I breathed, “A-h-h-h-h-h, A-h-h-h-h-h.”

And now I know how it feels when beauty “hurts.”

Notice how this paragraph has developed visual pictures, beauty, and feelings. I suspect you may now be ready to go walking along a woodland path to see what you will find. Great! Now write about it.

Illustrations will beautify your writing. You may draw or paint them yourself, or find them in another source. Nature has a way of supplying you with many pictures. Pressed plants, leaves, or flowers can be used, or you can arrange them onto white paper and have them color-copied. You will probably want to reduce them in the copier so they will fit onto your writings as illustrations. I like to tuck my illustration into a corner, then arrange my writing around it.

A definite rule...your first writing is actually just the first draft. Go back and rewrite it. Underline words you want to replace. Use that thesaurus! Check for correct spelling.

One more thing—if you have not yet done this, give your writing a title. While this can be done at any time, a better title often forms in your mind after the writing is complete.

And it's strange but true. The more you write, the more you will enjoy writing! When you have completed your story, slip it into a plastic sleeve and snap it into your loose-leaf nature binder. Now you are ready for your next experience in nature joys! ◀

## Look for Your Joys

Study Guide

by Judy Kauffman

*“I will praise Thee, O LORD, with my whole heart; I will show forth all Thy marvelous works. I will be glad and rejoice in Thee, I will sing praise to Thy name, O Thou Most High.” Psalm 9:1, 2*

It had rained for days. But this morning, golden sunlight streamed into the window. I really wanted to go on an early morning walk, anticipating what new nature joys could be waiting just for me.

I wasn't disappointed. The first blessing that met my eyes as I stepped outside was a family of fledgling tree swallows. They perched on the electric wire, all twittering and bubbling with pure joy. I always think their music is much like the sound of water bubbling over rocks.

Their perching was but for a moment. Then they took off, swooping, diving, and twittering in an unrestrained happiness of newly-acquired flying joys.

I walked down the quiet road south of us. A great white cloud hung above Lake Spaulding, looking so much like a great mass of cotton candy. The countryside was drenched with the wet “wetness” of our many rains. “Old Sam Peabody,” the white-throated sparrow's clear flute song, rang over the countryside.

I could hear another melodious warbling of sweet notes, but the songster eluded me for awhile. I really wanted to find him, and then I saw him, a goldfinch perched on the topmost dead branch in a tree, gleaming yellow against a blue, blue sky! He seemed intent on preening himself, but couldn't help himself, and burst into a medley of praise. He tried preening again, but dissolved into another song! Finally he was done both preening and praising. He turned watchful and sober, looking all the world over, probably in contemplation of the seriousness of life.

# MOTTO for the MONTH

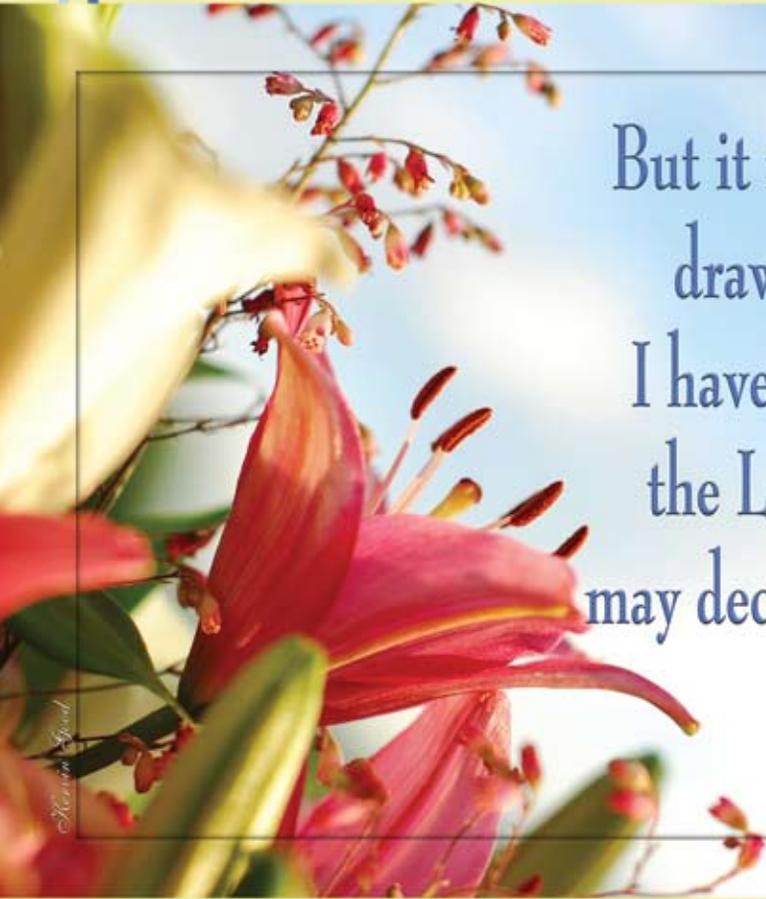
A vase of cut flowers on a fencepost was all Kervin Good needed to make this attractive motto.

*Kervin uses his photography to make inspirational "mottoes" which he sends to friends. Think of ways you can use your photography to bless others!*

But it is good for me to draw near to God: I have put my trust in the Lord God, that I may declare all thy works.

Psalms 73:28

Kervin Good



## ANSWERS

Answers to Acrostic on page 1:

1	A	S	T	E	R	O	I	D
2	A	S	T	E	R	O	I	D
3	T	I	T	A	N			
4	L	E	A	D				
5	G	A	L	A	X	Y		
6	W	I	G	L	E	R		
7	N	E	C	T	A	R		
8	V	E	N	U	S			
9	M	A	R	S				
10	S	H	L	L	S			

Answers to Crossword on page 2:

1	A	V	A	N	C	I	C	L	E				
2	M	E	T	A	M	O	R	P	H	O	S	I	S
3	T	R	O	P	O	S	P	H	E	R	E		
4	W	A	D	L	O	P	E	N					
5	R	E	H	E	R	E							
6	A	R	G	O	N								
7	V	E	N	U	S								
8	N	A	V	A									
9	P	O	L	D	E	R							
10	N	I	L										
11	I												
12	O												
13	R												
14	P												
15	O												
16	S												
17	I												
18	N												
19	A												
20	R												
21	E												
22	H												
23	E												
24	R												
25	N												
26	I												
27	A												
28	V												
29	N												
30	S												

- Answers to Fill-in-the-Blank on page 1:
- Tumbler 2. Uranus 3. Winds cause atmospheric gases to be evenly distributed over the whole earth.
  - China; Myanmar 7. Insects or spiders
  - toward center of nest 5. pigeon-toed; plantigrade
  - Essay answer
  - Poinsettia and bougainvillea 4. Essay answer
- Answers to True or False on page 3:
- True 2. False 3. False 4. True 5. False. (Sunlight takes 8 1/3 minutes to reach Earth.)