Contact Sheet

Journal of the Eastern Idaho Photographic Society Vol. 19, No. 8 August 2007

## Photography of the Stars

No, this is not the *Enquirer* and you will not find any shots of Angelina or Brad. But we were introduced at the July meeting of the Eastern Idaho Photographic Society to real stars and their cosmic relatives by **Thomas Davis**, **M. D.**, a gastroenterologist who practices in Pocatello. His hobby is astrophotography and astronomy. His work on photographs of several nebulae and other celestial bodies has been published in numerous astronomy journals – and we were treated to a slide show of these spectacular images.

Tom stated that he has always enjoyed looking at the stars. In fact, he got his first telescope at the age of twelve - - and hasn't stopped looking heavenward since. His current telescope has a  $12\frac{1}{2}$  inch aperture, f/3.5, and a focal length of 1078 mm. In essence, he is trying to collect a lot of light - - but much of this light may be noise since there is a lot of "light pollution" that a non-astronomer does not even think about. We go downtown in Idaho Falls and take photographs with 3200 speed B&W film at night for interesting effects. But look around you the next time you are doing this type of imagery. Do the street lights just aim the light at the street? Do the neon advertising signs direct the light down? Probably not since this is an added expense to do! But this excess light bounces around off

the molecules in the air and will

give a glow to the atmosphere. How far away can you see the glow of Idaho Falls when you drive on the Interstate? Imagine your telescope collecting this light pollution light instead of the desired extremely dim light that has traveled millions of light years to reach your lens. The light pollution wins every time. On your next nighttime flight somewhere, look out the window and appreciate all of that light from the cities below that is bouncing around all of those nitrogen and oxygen molecules. In fact, Tom stated that 90% of the people in the U.S. have so much light pollution where they live that they can not even see the Milky Way, the galaxy we call home.

Tom has his home on the side of the mountain near Inkom to avoid some of the light pollution from Pocatello. But things such as night skiing at Pebble Creek mean that he can't start his photography in the winter (when the atmosphere is clearer and the chip in his camera has less noise) until after midnight when they turn their lights off.

Standard photography does not have to worry about the rotation of the earth when we take a photograph. But astrophotography means being able to have your lens aimed at a set star for long periods of time. His telescope will track a star within a ½ pixel accuracy. And yes, this means all of his images are digital. But all of us who have tried low light images with our digital cameras

notice the noise in our images with longer low light exposures. Tom has a digital computer program that removes this noise. He will take a 10 minute exposure, download the data, take another 10 minute exposure, download, etc., for an entire night. Since red and blue are the two main colors seen in nebulae and most other heavenly images, he also has to have many of these images with color filters overlaid. We create numerous images and then stack them together. Another computer program will then put all of these images together in a couple of hours with Tom at the keyboard making sure that the images are true. A cloud floats by in the middle of an exposure - - data invalid. The wind picks up and stirs up the atmosphere too much - - data invalid.

For those of you who want more information about astrophotography that Tom gave in his lecture and I was not able to get into this abbreviated overview of his talk, please visit his web site: tvdavisastropix.com. You will want to revisit several times just to stare in awe at the universe that is out there, but we just can't see with our naked eye - - or with the camera we hold in our hands. It was a genuine treat to see such exquisite images. Thanks, Tom!

#### **Club Notes**

The August Show and Sale (August 10- 12) - Duck Race weekend is upon us, again more quickly than we thought possible. We have several members who are willing to share some space in their tents for those who want to show some of their work but do not have a large volume of images to date. This is really a neat experience and will give the Idaho Falls community a view of the amount

of really good photography that is done locally. It is a way that we can let the area know that they can have a very good quality image on the wall in their home, or office, or cabin, and not have to put up another picture of the dogs playing poker on black velvet. Yes, the cost of our image may be a little more than the mass produced image; but we can give them something that is unique and that may be more artistic than what was available elsewhere. Very few of us will be able to quit our full time jobs by the sales of this weekend, but you will have a good time meeting people who look at your images and want to get more education about photography as well as the camaraderie of talking with your fellow club members during slow time.

Even if you don't want to participate and have a booth, please come down and support your fellow club members. We will set up the tents on Thursday at about 7 p.m. The more bodies present the quicker the tents go up. Most people are in their booths from about 9 a.m. until 5-6 p.m. on Friday and Saturday. Sunday take down the tents time is usually around 4 p.m.

Remember, we warned you how quickly the August Show and Sale would arrive. More warnings: The Eastern Idaho State Fair is over the Labor Day weekend (only one month away) and the October Juried Show is just one month later. These are more venues for you to show your photographic efforts to our community. We can be proud of the level of images and artistic ability that we have in our camera club. Hopefully, getting your images before the community in these shows will reward you with more sales for you efforts.

Also, check the EIPS website often since Roger has a listing of images he needs for the various publications that we have some of our photographs in. Lead times for magazines mean that last years' winter pictures are needed now rather than the image that is still in your camera. Keep your filing system up to date so that you can locate your images quickly. The better your filing system, the more images you will get published. Yes, you just want to take more pictures and not have to worry about this type of stuff, but a great image will not be shown if you can't find it!

#### **Advancement Program**

The theme for August will be: *The Past.* Please bring your three best slides/prints/digital files and join us on August 16 at 7:30 p.m. at the Conference Room at 1900 Grandview. Even if you do not have pictures to show, remember that your photography will improve the more photographs you see. Join us, please.

For our new members the remaining themes for the rest of the year are listed below. We want to see your interpretation of these subjects. If you don't have anything for that subject, just bring your recent images since we know that we didn't give you enough lead time.

September – Photographer's Choice October – Critters November – Photographer's Choice December – Color Explosion

# Did You Know - -

That nebulae are a collection of glowing gasses, mainly hydrogen, and give off a red color? This is somewhat akin to our Northern Lights in the way it appears.

That our sun will grow into a red giant star in only about 50 million years?

That when a supernova explodes it creates some of the heavy metals but only down to iron on the elemental chart?

That our sun is slowly producing heavier and heavier elements as it is progressing toward a red giant star?

## **Camera Ops**

Don't forget to use your camera when you go on vacation this summer. Don't forget to bring those images to different Advancement Programs. Don't forget to lead a club field trip to some of those areas you especially felt were photogenic. We get so involved with our activities (playing a softball game, riding bikes with the grandkids, etc.) that we forget to bring along our camera. Even if it is just your point and shoot, bring it along. Even if it never gets shown to anyone but your spouse or your friends, keep taking those pictures. You ultimately learn something from almost every photo opportunity. Next time the face will be easier to see because the shadow of the branch isn't there. Next time you'll use the fill flash or ask him to take off his ball cap so that you can see the eyes better. Keep learning! Share those learning tips!

#### **Monthly Meeting**

#### **Date: August 2, 2007**

# Time: 7:00 p.m. – note change

#### Location: 1501 Lowell Dr.

#### **Program:**

This is our yearly picnic, so get ready to eat. Bring your own table service and a pot luck dish to Roger and Sue Heng's house at 1501 Lowell Ct. Hamburgers and drinks will be provided by the club.

#### Graffiti

EIPS is a group of amateur and professional photographers who have joined together to further the art and craft of photography. Please join us and expand your horizons. Sharing knowledge makes all participants better at their craft. We meet on the first Thursday of each month for our educational lecture. Then the third Thursday is our Advancement Program where we share some of the images we have done. We meet at 7:30 p.m. at 1900 Grandview Ave in the conference room.

Sue Heng – President 1501 Lowell Drive Idaho Falls, Idaho 83402 Membership Info: Web address: <u>www.eips.net</u>

