

Orbit



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AstroCATS

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Roger Hill, Editor

AstroCATS is upon us, and untold hours of work by a number of people in the Centre are about to pay off.

There are all sorts of rumours floating around about what this will mean to the Centre, both in terms of exposure and monetarily. Suffice it to say, this is a big deal, and could get even bigger. However, it needs more people to help out on the days themselves.

I know that many people have work schedules that are subject to change. I am in that category, and I won't know until a few days before whether I will even be able to attend, let alone what hours I can volunteer.

We have a long history of volunteerism in the Centre, of people stepping forward to help out. It's not uncommon for a few people to organize an event, but when hands are needed, our members have always stepped forward.

This is one of those times.

There are relatively small groups of amateur astronomers all over the world that manage to do great things. There aren't thousands of people in the NYAA who put on StarFest, there's just a handful. The Riverside Telescope Makers (Astronomy Expo), Rockland Astronomy Club (NEAF), Springfield Telescope Makers (Stellafane), Austin Astronomical Society (Texas Star Party) are all organized by a small team of very dedicated people who rely on volunteers at the event itself to succeed.

AstroCATS is no different. And the Hamilton Centre could stand to gain just as much as any of those renowned astronomy organizations.

I know a number of people who have said that they did not join an astronomy club to put on a trade show, and that's fine, because I don't know anybody who did. However, ask virtually anyone who has volunteered to do anything for the Centre, or the Society, just how much they get out of it, and you'll hear words and phrases like "giving something back to the hobby", "camaraderie", and "doing my part". And yet those words don't get across the immense feeling of satisfaction you get from a job well done.

I know I use the same sorts of arguments to get people to volunteer for the Board, but in this case, all the Centre really needs is part of one day on one weekend.

If, however, you can't do that, please come on out to the event itself, pay at the door, peruse the hardware, check out the software, visit the booths, take in a seminar, come and listen to a speaker or two and have some fun.

So...send an email to **Shawn Preston**, shawn@skyminer.ca and offer to help!

We also have a banquet coming up in June. It'll be held at the Legion where we meet every month, it'll be the least expensive banquet we've had in many a year, and just possibly has the best speaker we've ever had in David Levy. Over the years I seen many talks given by some of the finest speakers on the planet and having heard David talk on a couple of occasions, I know whereof I speak. If you have a friend or two that you want to introduce to astronomy, or want them to understand a bit about why you find this hobby, or this subject, so fascinating, you won't do any better than to bring them along to our banquet.

Talk to you next month!

Roger

Presidents Report—Andy Blanchard

I've been visiting other clubs and centres in southern Ontario and introducing them to AstroCATS. The response has been overwhelmingly positive, and it seems like the time is now ripe for an event like this in southern Ontario. So much so, in fact, that we've had a number of people volunteer to help out!

We could use some more volunteers, though. If you're going to be attending AstroCATS in either the morning or afternoon, it'd be great if you could help out during the other part of the day.

Send an email to **Shawn Preston**, shawn@skyminer.ca, you'll be glad you did!

We've got more and more vendors signing up to be part of this inaugural event, and while others are holding back to see how successful it's going to be with the intent of taking part next year, there's no doubt that the ones who have climbed aboard already are some of the biggest names in the hobby. Although this list will be out of date before it gets in your hands, (visit the AstroCATS web site at <http://www.astrocats.ca> to check on the latest), I'd like to thank Astro Gizmos, Astronomy Magazine, Backyard EOS, Camtech, Canada-Wide Astronomy Buy & Sell, Celestron, iOptron, Kendrick Astro Instruments, Khan Scope Centre, KW Telescope, MallinCam, Meade, New Eyes - Old Skies, OPT (Oceanside Photo and Telescope), Royal Astronomical Society of Canada (RASC), Sky & Telescope Magazine, Sky News, Starizona, Simulation Curriculum Corp. (Starry Night), TPI Astro (Telescope Performance Improvements), and Vixen Optics for putting their trust in us.

AstroCATS is not just about stuff to buy, though, there are a number of seminars and sessions to attend to help you further your interest in astronomy, too. We've got some notable amateurs from southern Ontario (Glenn Kukkola, Gary Colwell, Ron Brecher, and Dave Dev) giving talks on topics as diverse as "Choosing your first telescope" to "Advanced image processing techniques". We've also got well known people like Terry Dickinson (last years Banquet speaker), Jim Kendrick (who has spoken to the Hamilton Centre quite a few times over the years), and Jim Fitzgerald, a professional educator who was an integral part of the NASA Aerospace Education Services Project (you seriously don't want to miss this!).

So, if you can't attend, or volunteer, you can still help us out. If you use Facebook, please go to our Facebook AstroCATS page <https://www.facebook.com/events/286276131504593/?ref=ts&fref=ts>, and invite your friends and family! Actually, it'd be great if you'd do that even if you will be there.

See you Thursday at the May Monthly meeting.

Andy Blanchard
President RASC Hamilton

Terence Dickinson, the Saturday Keynote Speakers, in a presentation suitable for everyone, will talk on “21st Century Trends in Backyard Astronomy”.



Terence Dickinson is a leading amateur astronomer and science writer who lives near the town of Yarker, Ontario. He is the editor of SkyNews magazine and an astronomy commentator for Discovery Channel Canada. He has written fifteen books, which are widely regarded as some of the best resources available for beginners in astronomy. Most notably, "The Backyard Astronomer's Guide" and "Night Watch: A Practical Guide to Viewing the Universe" are considered "must have" books by all astronomers. Terry even has an asteroid named after him: Asteroid 5272 Dickinson.

Our Sunday Keynote speaker is **Jim Fitzgerald**, a retired NASA Educator will offer “20 Years of NASA Education .. What a Ride!”. This presentation is also suitable for everyone.



In 1990 a unique opportunity took Jim out of the classroom and into the world of NASA. He became part of the NASA Aerospace Education Services Project (a NASA program for education which started in 1961). This position placed Jim in front of students, teachers, administrators, College/university staff, and the general public. In these arenas Jim provided professional development for teachers, classroom & assembly programs for students, and many special presentations related to NASA, its mission, research, people and NASA spacecraft. Jim Started with NASA AESP in 1990 by being in the clean room where Galileo was in final stages of preparation for launch. Jim also flew 4 days on the “Zero” G aircraft. Jim has worked with and was trained by the people of NASA including scientists, engineers, astronauts, and many others who contribute to NASA missions. Jim's presentation will inspire both young and old!

“**Choosing Your First Telescope**” will be offered by **Glenn Kukkola**, and is aimed squarely at the Beginner and Family Level. If you are like most people when they first get interested in astronomy, choosing the right telescope is a difficult decision. There are so many different designs in so many price ranges. If you are having trouble deciding, then this seminar is for you! Glenn has owned just about every make and model of telescope there is! Lean on his expertise to help you choose just the right one!

A beginner and intermediate level presentation on “**Dew Control Techniques**” will be conducted by **Jim Kendrick**, a name synonymous with dew control for two decades. Telescope lenses and mirrors are “dew magnets”! Warm humid air during daylight falls as dew (or frost) when the night time temperature drops. BUT... there is a cure! Each telescope design offers a different challenge but Jim will show you the perfect solution.

Gary Colwell offers “**Telescopes – From Galileo to Modern Day**”, and it is aimed towards beginners, families and intermediates. Have you ever wondered how Galileo discovered the telescope? Or have you thought what science would have done without it? In this seminar you will learn about the evolution of the telescope and how telescopes of today have revolutionized our thinking of the universe. From Galileo to the Hubble...this seminar will help you understand the history of the telescope...and the wonders of the heavens it can help you see.

If astrophotography interests you, then you will want to attend “**Advanced Image Processing Techniques**” given by **Ron Brecher**. Aimed at the intermediate to advanced level, it will be 2 hours long (with breaks). You've learned how to acquire good data with nice round stars. You've mastered image calibration, registration and stacking. Now you have a nice image ready for processing. This advanced workshop will go far beyond the basics to demystify some powerful image processing techniques. This presentation will cover things like "linear" and "stretched" images, recommended work flows for processing different kinds of deep sky images, using masks for image processing, software options and how they differ for astronomical image processing, deconvolution to recover detail, techniques to combine RGB and H-alpha data without affecting the size or colour of stars or overall colour balance and multiscale processing to reveal hidden detail without artifacts or reduced contrast. Each of the advanced topics will be described and demonstrated using real data.

Glenn Kukkola will introduce you to the night sky in a way that the whole family can enjoy in “**Family Observing**”. Whether you are young, or young at heart, this seminar will introduce the whole family to the wonders of the night sky. Be sure to bring the kids to this enjoyable seminar!

Dave Dev has an intermediate level seminar on “**Imaging In Light Polluted Skies**” Most of us live in or near a city where the lights destroy the beauty of the night sky. Seeing the outline of the Big Dipper can be hard enough, but getting any images of the night sky is an effort in futility...or is it? With the addition of a simple filter, Dr. Dev has mastered the art of capturing amazing images of deep sky objects from the light polluted skies of his own backyard!. Come learn how you can too!. This is a must see seminar if you want to take breathtaking images in the Big City!

“**Astrophotography Automation - Planning Your Next Purchases**” by **Ron Brecher** is an intermediate to advanced level presentation. Those that try their hand at astrophotography quickly learn that achieving good focus and framing the target can consume a good chunk of time. Time that is better used in collecting data! How many of us have purchased “budget priced” equipment and software only to find out that we should have bought the “good stuff” in the first place? Ron will present the most popular methods of automating these tasks. What difference does it make? Imagine getting perfect focus, and centring your target in less than 5 minutes! The goals of this seminar are to introduce:

- Motorized Focusers and how to achieve "auto-focus"
- Centring your target using software tools... aka "Plate Solving"

So before you spend another dime, make sure you attend this seminar! The software tools that will be introduced also have the ability to operate motorized domes as well as many other useful functions (filter focus offsets, etc.).

Lastly, **Gray Colwell**, in his inimitable style presents a beginner to intermediate level talk on “**Camera and Tripod Astrophotography**”. If you have always wanted to simply take pictures of the night sky without having to take the time to set up a telescope, then this seminar is for you. Gary is a seasoned astrophotographer who started out with just a camera and tripod to capture pictures of Constellations, star trails and picturesque images of the surrounding landscape and sky. You will learn how to capture breathtaking images of the night sky with the simplest of equipment. You will even learn how to put your pictures together to make a movie of the night sky! Join in and learn the basics of astrophotography!

Vendor Reviews by Joseph Pipitone

KW Telescopes

I bought my EQ6 mount as recommended from KW telescopes a year ago. I was very impressed by their new store setup and the great help I got from the very professional, friendly and no pressure staff. They showed me the same patience and excellent advice at last year's StarFest when I was buying an eyepiece in the midst of other buyers. I think of KW similar to a club member in terms of informed advice that I can trust. I plan to buy most of my future items now that they have such a great and convenient website.

Kendrick Instruments

I bought my dew heaters from the U.S. not knowing that Kendrick was situated in Toronto. One of the heaters was defective but as I was contemplating sending it back and all the hassles and time involved. Fortunately, I met the owner Jim Kendrick at StarFest a month later and told him about my disappointment at his faulty product. He was calm and simply said "I am sorry to hear that" that rarely happens but just call me directly at my office and I will make it right!" I was floored at his honesty and approach so I will be ordering from this company directly now.

TPI Telescope Improvement Co.

I kept hearing about this companies telescope tripod improvement stabilizer so I bought one. It has been a great find with high end quality material, easy to install, works as advertised and a great way to store my battery on it. Love the product and in my opinion it is the best on the market from all the other imitation products and it's Canadian made to boot.

Two Focusing Aids for Astrophotography with Camera Lenses

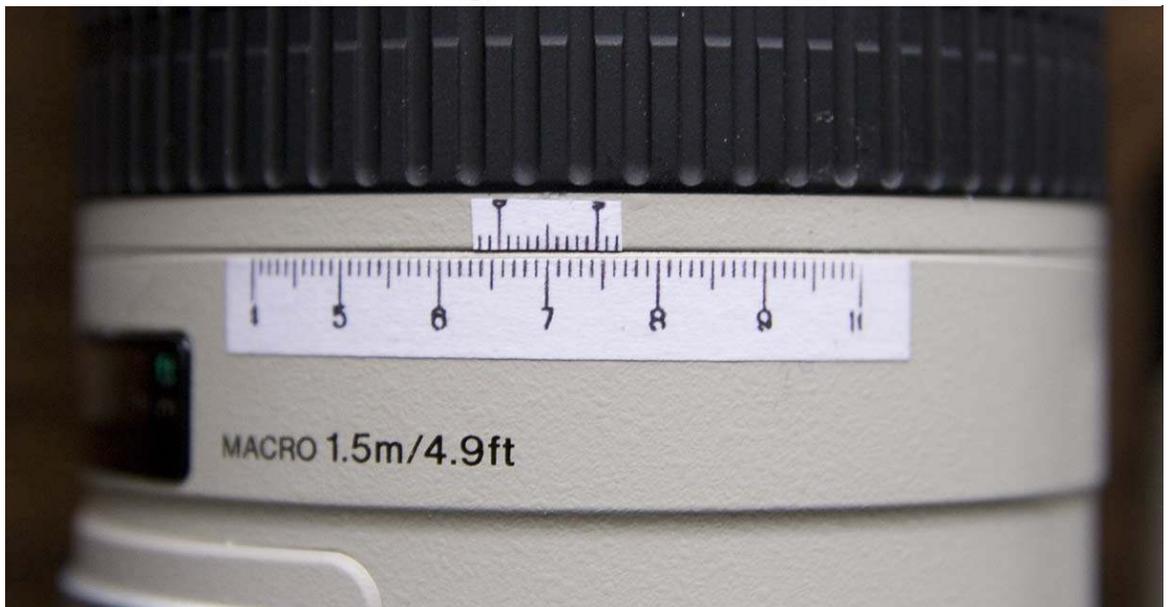
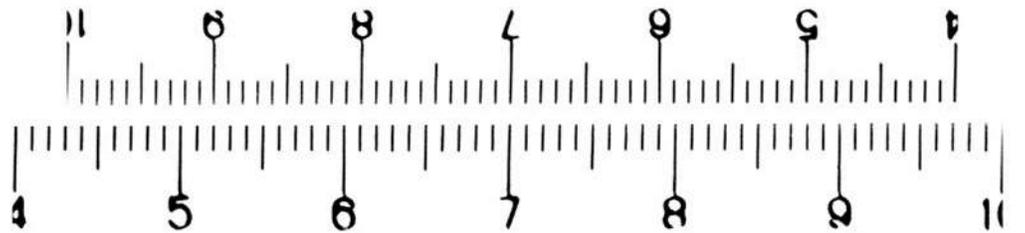
W. John McDonald (Victoria Centre)

For anyone contemplating doing wide field astrophotography using camera lenses, focusing can be a challenge. It is also quite important to get a more precise focus in astrophotography than is usually needed in terrestrial imaging but most modern camera lenses are not well suited to manual focusing. The focus rings have too little movement to provide a precise setting and the scales are usually too coarse to allow repositioning the lens once a good setting has been found. Alan Dyer has highlighted the importance of precise focus and given some suggestions for achieving it on page 87 of the November 2007 Sky and Telescope magazine. The methods and devices below are some additional ideas for focusing of camera lenses.

Aid One – the Vernier Scale:

The first useful aid is a simple Vernier Scale as shown below. This is really two scales one of which is 10% shorter than the other. By attaching one to the lens body and the other to the focusing ring, it is possible to estimate the focus position to 1/10th of the smallest division of the longer scale. To do this you simply look at where the left index mark on the left of the short scale falls on the longer scale. Suppose it lies between 6.5 and 6.6 as shown in the image below. Then you look for which of the short division marks lines up with those of the longer scale. Suppose it is the 5th one. Then the scale reading is 6.55. A magnifier can be used if needed and of course, a red flashlight is required in the dark.

If you wish to try this, just print an appropriate sized version of the first figure for your needs and cut each scale out. You just need a length of the short one that covers two of the large index marks but it is convenient to have a longer section of the larger scale. I have attached the scales to my lens using paper glue. For weather resistance, the scales can be covered with clear tape.



Aid 2 – Micro Focuser

The second tool is a micro focuser made from some bits of wood and a 4-40 screw as shown below. The picture is fairly self explanatory. Two plates are connected via the screw such that they can be moved relative to each other with the screw. I have a bit of reflecting tape on the screw as a tab to facilitate counting turns. One of the plates is held on the lens body and the other is attached to the focusing ring using elastic bands.

I use this tool to check for the precise focus position by taking a series of images of a bright star while keeping track of the number of turns of the screw I have made from the starting position. Once I know that number for the best focus position, I use half turns around that spot. The focuser can be repositioned very accurately so it is easy to make repeated checks and be sure of the best focus point. Then I take the vernier reading for the most precise focus point and use that to reset the focus quickly if it is disturbed for any reason. Unless there is a significant change in temperature it is not usually necessary to re-check the focus using the Micro Focuser during a session or even when setting up on a different night. Checking the vernier to make sure nothing has changed is usually sufficient. In the case of the 300 mm L series Canon lens I have, I have to use the micro focuser each night because the lens has a slip clutch on the focus ring and the relative position of the two scales will shift if the ring goes past either end of the focus travel.

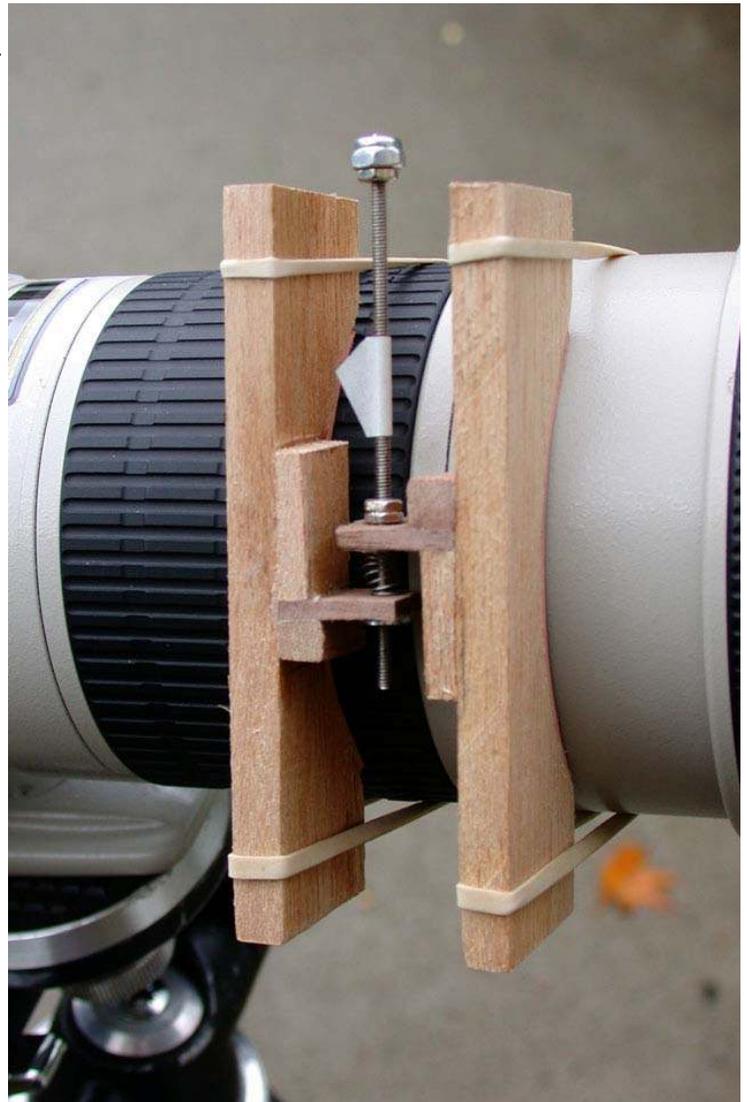
Using the Focus Aids

The following is a set of steps gives precise focus quickly and fairly painlessly.

- 1) With the lens on auto focus, focus on a bright star or the moon. If possible, set the cameras to use a single autofocus point in the center of the screen. The target must be located on top of this focus point for the autofocus to work. For ease in achieving this, it helps to switch on the autofocus led light manually if you can and use it to aim at the target.
- 2) Read and record the vernier scale position.
- 3) Attach the micro focuser and then, and only then, switch to manual focus.
- 4) Check the vernier reading and reset the focus ring if necessary using the micro focuser to get the same reading as found in step 2.
- 5) Do a series of images of a bright star with different micro focus settings. Be careful to avoid overexposure of the star. Try 1/60 second exposure at ISO 400 to start and adjust to get a visible but not to bright image.
- 6) Pick the best focused image from the series and reset the micro focuser to reproduce that setting.
- 7) Record the vernier reading that gave the best focus and the ambient temperature for future reference. If you inadvertently move the focus ring by mistake and need to reset the focus position the vernier reading will usually suffice.

Footnote

On many cameras, it is possible to select the focus point you want to use instead of having them all active. Often it is also possible to turn the indicator led on manually and have it stay on for a brief period while you center the target.



RASC Book Review by Joseph Pipitone

SPACE ATLAS: MAPPING THE UNIVERSE AND BEYOND

By James Trefil, National Geographic Society, 2012

James Trefil is an American physics professor who has written over 50 science related books. His collaboration with the National Geographic Society has produced a Space Atlas that is consistent with the high quality of the Society publications. The book is highly informative, with extraordinary visual and descriptive information that is accessible to the scientist, amateur astronomer or the casual reader alike.

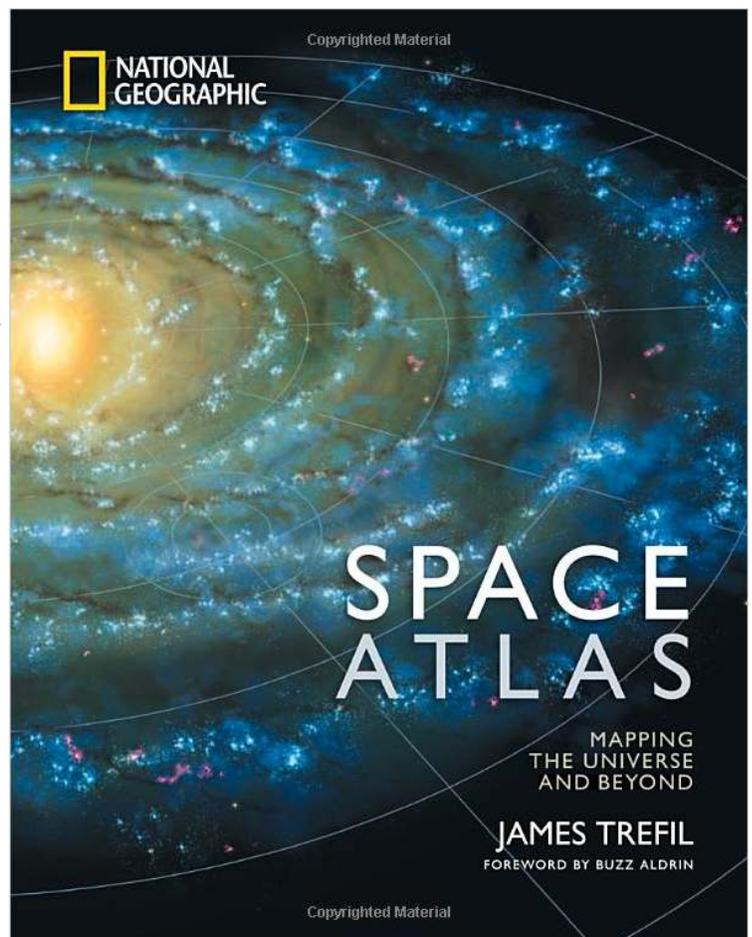
The book is organized around three main themes, starting from our solar system, stars in the Milky Way and into the Cosmos. This book ends with what are key mysteries of the universe yet to be resolved. In addition, the Appendix is full of useful reference information. The index is well organized with key bold pages for quick reference. Buzz Aldrin provides an inspiring forward by to this book by summarizing the past space accomplishments and encouraging us to keep pursuing our explorations of the universe and eventual space travel.

The handling of our solar system in the first part of the book is organized into inner and outer planets with clear above and below views for how things are related in our solar system. The information of each of the subject matter i.e. sun, planets moons, asteroids, comets etc. is comprehensive. The detailed graphics and maps of each subject is very informative and easy to follow for all levels of learners and renders the book a true atlas. The next sections on the Milky Way and the Universe are handled in the same detailed way.

If you are a systematic and visual learner you will enjoy this book since the book is organized this way. Some interesting features include, highlighting key areas on maps by coloured numbers and bullets, explanatory cut-aways and sidebars that include interesting information. This is the kind of book that you can pick anytime, put it away and return to it or some other area of interest at anytime. As such, it is a great book to have around for brief, reference or sustained reading. I highly recommend this book and I am pleased to add it to our collection.

List Price: CDN\$ 57.00

Price: **CDN\$ 35.74**



Pocket Sky Atlas Challenges for May—John Kulczycki

We find ourselves beneath the Great Bear. She has woken from winter's long sleep and slowly makes her steady journey to summer's feeding grounds; as do so many amateur astronomers, finding themselves empty, needing as many full meals of starlight as possible.

May skies do not leave us starving or even wanting. Twilight and cloudlessness cause us to strain our eyes, looking for those first flecks of distant light. Even the moon seems more attractive. We start to look for those familiar sign posts that have guided us in these hunting grounds. The patterns are recognized, and our minds find images start to form from past experience, of treasures we have seen. And we are beckoned, drawn into the night, with just a little euphoria, knowing that sensations await.

I've indexed the objects to their respective pages.

Naked Eye:

Castor and Pollux Page 25 ;
Izar Page 53;
Zubeneschamali and Zubenelgenubi Page 56;
Eltanin Page 63.
Alphecca Page 53;
Antares Page 56;
Sulafat and Sheliak, Page 63.

Small Scopes and binoculars:

Mebsuta Page 25;
M71 Page 64:
Brocchi's Cluster, Page 65;
NGC 6814 Page 66;
M72 Page 66;
M73 Page 66;
M11 Page 67;
M26 Page 67;
M18 Page 67;
NGC 7662, Page 72;
M103 Page 72;
M52 Page 72;
NGC 7039, Page 73;
M39 Page 73;
M29 Page 73.

Larger Scopes:

NGC 5363 Page 44;
NGC 5364 Page 44;
NGC 4612 Page 45;
UGC 6887 Page 45;
M60Page 45;
M59Page 45;
M58Page 45;
NGC 4435Page 45;
NGC 4435 Page 45;
NGC 4038 Page 47;
NGC 4039 Page 47.

Bonus objects:

NGC 5694 Page 46;
NGC 5850 Page 46;
NGC 5846 Page 46;
NGC 6760 Page 65;
IC 4756 Page 65.

The Redneck Astronomer: Tony Darnell

God, I hate this freakin' picture. It was taken last July/August on my vacation to Florida to see my Dad. Before I go any further, I just want to say that I've since lost 30 pounds, inspired in no small part, by this freakin' picture.

I took it with the purpose of maybe using it as the photo on my About page, but when I saw it, I said there was no way I was putting THAT picture on my site.

The more I looked at it though, I came to realize that this picture says a lot about me. No, not that I'm a little too fond of Guinness and microbrews, rather it shows that I'm somewhat of an anomaly (actually, my wife says that all the time). It occurred to me that my life straddles many different worlds.

If I were asked to describe myself in one sentence, it would have to be: "I'm a computer programming redneck astronomer-inventor who plays Irish music, reads science fiction and loves to fish."



I have very humble, simple roots and I seem to be interested in everything. Most of the time, I segregate all of the worlds I inhabit – put everything in my life into little compartments. Sometimes however, those worlds collide.

And it really freaks me out when that happens.

Let me tell you the story behind this photo. It was taken on the last day of our 5-day fishing trip to catch redfish in the Mosquito Lagoon, a region of water immediately north of the Kennedy Space Center. We had spent all morning (since about 4am) fishing. It was stiffling hot, muggy, and we didn't catch a damn thing.

On the last day, I wanted to go to the Space Center. I was tired of looking at the Space Shuttle on the launch pad from the boat, I wanted to get closer. Besides, I hadn't been there since the 70's when my parents took me there for my birthday one year, and I had great memories of it. I wanted my kids to see it too.

So we packed up our stuff at about noon, got the boat out of the water, and went to Titusville.

I want you to visualize this:

We had just come off a boat where we spent all morning taking catfish and trout-that-were-too-small off of hooks, handling shrimp and small mullet for bait, and sweating like proverbial pigs. To say we were 'ripe' would be an understatement, trees wilted as we drove by and the alligators shook their heads and made snorting sounds as we passed. I think a couple of seagulls fell out of the sky. We pull up into the Kennedy Space Center parking lot in a pickup truck with CB antennas sticking up, guns in a gunrack (they were my Dad's), pulling a boat full of fishing gear.

It felt like going to Disney World with the Clampetts (from the Beverly Hillbillies TV show). All that was missing was a Jethro Bodine YEEEEHAAWWW when we pulled up and shooting guns in the air.

The feeling was so surreal, my redneck world had crashed into a world where space travel was common, the gateway to the universe: Kennedy Space Center .

OK, so the first problem was parking. After we found a spot for the truck and boat (we parked by all the gigantic RV's), and stowed all the valuable hunting and fishing gear, we get on the Tramway to the ticket area. Not surprisingly, we had the entire bench to ourselves. "Remember kids, we parked in 'Buzz Aldrin', row 5." A rather attractive tourist about three rows up kept waving her hand in front of her face. Others were checking the bottoms of their shoes.

So, after we got our tickets, next was security. My Dad had forgotten to leave his big-ass (and I mean BIG-ASS), knife in the truck. It was this big, hairy looking knife with killer jagged edges. Needless to say, security wouldn't let him through.

So we trekked all the way back to the truck to put the knife away (we walked to spare the pleasant-smelling tourists this time), and went inside.

Now we find ourselves with tourists from all over the world, looking like we just got off the... well... boat.

We had a great time. My favorite part was the Apollo Saturn V area. The kids couldn't believe how large it was. Immediately, all of those hours sitting in front of the TV as a kid came flooding back. I have probably stared at the Saturn V rocket more than anything else in my life, except perhaps into the eyepiece of my telescope. Oh, and Angelina Jolie.

I had stared at it on TV (I also have a probably unhealthy attraction to Walter Cronkite because of my hours watching him talk about the Apollo program), I had posters of it in my room (Is it weird that I had the Apollo 11 crew picture right next to my Farrah Fawcett poster? Please say no.), I built plastic models of it, and I even launched a 1/50th scale model. I dreamt about that rocket and was inspired by what it meant. I wanted to BE in that rocket.

Next we saw the most amazing IMAX movie I have ever seen, Magnificent Desolation . It was probably the best movie (of any kind) I have ever seen (even better than Lord of the Rings). I left that theatre feeling as if I had just gone to the moon. I actually cried, I'm not kidding. The effects were amazing and the re-enactment sequence where the 3-D camera is behind the astronauts as they land the lunar lander on the moon really got me. It really felt as if I was standing behind Neil Armstrong and Buzz Aldrin as they landed the Eagle. I was a kid in 1969 living my dream.

A smelly, pudgy, redneck astronomer with tears streaming down his face wearing 3D glasses is not a pretty site. My boys asked if I would please walk a few paces behind them as we exited the theatre.

Our last stop was the Liberty Bell exhibit. The actual capsule that Gus Grissom flew in during the Mercury program had been salvaged and was on display at KSC. "Oh man, are you kidding me?" I was in heaven. This exhibit had artifacts from the time in my life when my strongest memories about becoming an astronaut were born and led to my becoming an astronomer. The 1960's and 1970's were a powerful time for me: the dreams of my life were being cast. While I was only about 8 when Armstrong landed on the moon, I had a clarity of purpose that few kids my age could relate to.

My kids however, couldn't care less. "Dad, when's dinner?"

"Look! This is the ACTUAL capsule that Grissom flew in! Look how cramped it is."

"Yeah Dad, that's great, but we haven't eaten since the sandwiches on the boat."

"Check this out! They found the roll of dimes he took with him!"... "Daaaaaaad...."

"Alright! Here, take this camera and get a picture of me next to this capsule and we'll go buy one of those \$12.00 hamburgers."

So that's the story of the picture of a redneck astronomer. It's a picture of a simple guy who couldn't do math to save his life until he was in his thirties, finally enjoying a life of his dreams working in astronomy. With a beer gut that wouldn't quit.

After I got home from that trip, I debated deleting that photo from my camera. Instead I printed it out and put it by my computer where I would have to look at it everyday. Now that I've lost that weight, I can post it.

So, I'm an anomaly. I'm a redneck astronomer. Like Homer Hickham (from the movie October Sky, a true story of a coal miner's son who went on to become a NASA engineer), I emerged from the swamps of Florida to study the universe.

Here's a few characteristics of redneck astronomers (be careful, we spook easily. You could go your whole life and never see one):

Say "YEW-knee-varse" instead of universe

Have a fishing rod holder on the fork mount of the telescope

Love to fish at night so we can do two things at once: stargaze and catch fish. It's actually our idea of heaven on earth.

One of the few groups of people who really know what a truly dark sky looks like.

Can see tailing redfish by starlight alone.

Have a can holder mounted on the fork arm of their scope and only observe those areas of the sky that won't cause the beer to spill.

Differ from most rednecks in that we drink microbrew beer instead of Bud Light.

Hang fishing lures from the guidescope.

Have a beer cooler underneath the tripod.

Hack our telescopes to include a CB radio.

Have old telescopes hanging from a tree in our front yard instead of old car engines.

Put naked-lady silhouette mudflaps on our tripods.

Have "Insured by Celestron" bumper stickers (I know, I'm reaching with this one).

Battle cry: "If telescopes are outlawed, only outlaws will have telescopes."

To us, a 9mm takes on a whole new meaning (it's an eyepiece focal length – look, if you have to explain it, then it's not funny...).

Cool our CCDs by strapping a cold beer to it.

The gun racks in our trucks have refractors in them.

Name comets we discover after NASCAR drivers.

Name comets we don't discover after NASCAR drivers.

Think NASCAR drivers would make great astronauts.

The movie October Sky makes us cry like blubbing idiots.



- Hamilton Observing Sites**
 Observing site in Hamilton and area.
 2 views - Public
 Created on Oct 18 - Updated Oct 20
 By pbrandon
[Rate this map](#) - [Write a comment](#)
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576 Concession 7E, Flamborough, ON
 - [Tim Hortons, Waterdown](#)
255 Dundas St E Waterdown, ON L0R, Ca
 - [The Royal Coachman](#)
1 Main St N Waterdown, ON L0R, Canada
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 - [Tim Hortons, Guelph Line](#)
2400 Guelph Line Burlington, ON L7P, Car

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Calendar for May, 2013

Mon	Tue	Wed	Thu	Fri	Sat	Sun
		01 7:30pm» AstroCATS Planning meeting at the Observatory	02 ☾ 8pm» Public Meeting Michael Reid UofT Life on Alien Worlds	03	04	05
06 8pm» NOVA Program - Lesson 7	07	08 7:30pm» Star Gazing at the Observatory	09 7:30pm» RASC Board Meeting	10 ☉	11	12
13	14	15	16	17	18 ☽	19
20	21	22	23 7:30pm» Free Public Astrophotography Lessons	24	25 ☼ 10am» AstroCATS Telescope Trade Show	26 10am» AstroCATS Telescope Trade Show
27 8pm» NOVA Program - Lesson 8	28	29	30	31 ☾		