

STARBUST

Newsfluter of the Boyal Gastronomical Society of Mars
Redmonton Centre



April 2007

Volume 52 Issue 8



Our new Mascot

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RASC Edmonton Centre Contact Information

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Vice-president	Sherry Campbell	
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Treasurer	Mark MacDonald	
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Co-National Council Rep	VACANT	
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Councillor	Sheldon Helbert	
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Councillor	Ross Sinclair	
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Observers' Group Director	Paul Campbell	
Membership Secretary	Massimo Torri	
New Member Advisor	Pat Abbott	
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Equipment Coordinator	Bob Jahrig	
Other Positions		
George Moores Workshop Coordinator	Sherry Campbell	
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Scope Rentals	Roy Ramdeen	
Scope Rentals - backup	VACANT	
Speaker Coordinator	to be confirmed	
Librarian (backup)	Vicki Huntsman	
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Outreach Coordinator (OrC)	Dave Robinson	
Deck Activities Coordinator (DAC)	Cornelia Blunck	
Astronomy Days Coordinator (ADC)	VACANT	
Public Relations Officer (PRO)	Shelly Sodegrin	
Social Director	Dave Cleary	
Stardust Distribution	Massimo Torri	
Archive Liaison	VACANT	
Dark Sky Preserve Coordinator	Sherrilyn Jahrig	

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Centre Website <http://www.edmontonrasc.com>

Observing Deck 452-9100 ext 2249

Stardust Articles for Stardust may be submitted by email to mward@interbaun.com. Submission deadline is the last day of the previous month (e.g. for the May issue submit by 30 Apr). Submit as MSOffice OR OpenOffice OR AbiWord OR plain text. Please avoid use of fancy formatting, odd spacing, and strange fonts. Graphics (photographs, illustrations) should be submitted as separate files, and clearly identified.

Upcoming Events, Meetings, Deadlines, Announcements

Regular Meetings and Events

Apr 8	Edmonton Regional Science Fair	June 28 - July 1	General Assembly (Calgary) AAVSO ALPO
Apr 9	7:30	Sep 10	7:30
Apr 21	International Astronomy Day	Oct 15	7:30 expenditure proposal deadline
Apr 22	Earth Day	Nov 12	7:30
May 14	7:30	Dec 10	7:30
Jun 11	7:30		

Council Meetings

Apr 23	7:15 2 nd pass at proposals	Oct 29	7:30	1 st pass at proposals
May 28	7:15	Nov 26	7:30	2 nd pass at proposals
Sep 24	7:30			

Observing Schedule

Mar 16-17	Sep 14-15
Apr 13-14	Oct 12-13
May 11-12	Nov 9-10
Jun 9-10	Dec 7-8

Northern Prairie Starfest

Sept. 11-16 See www.edmontonrasc.com/nps.html for details.

You Be the Judge! at the Edmonton Regional Science Fair - Saturday, April 14

Many years ago, before the time of Bruce, which only Franklin can remember, the Edmonton Centre of the Royal Astronomical Society of Canada established an annual endowment with the Edmonton Regional Science Fair enabling the most worthy astronomy project to win a glorious RASC Special Award. On **Saturday, April 14**, some from our midst must once again step forward to serve as judge to select a noteworthy project to win this coveted trophy. Wayne Malkin, the 2006 winner of The Bryce Heartwell Memorial Award for Astrophotographer of the Year, has graciously provided his services to this praiseworthy task. Working side-by-side with such a distinguished member makes the undertaking doubly rewarding.

If you are able to help Wayne, please email the Centre's Public Education Director at aaquisto@macewan.ca. You can register as a judge on-line at the links indicated below.

Home Page:	http://www.ersf.ca
Judge Registration:	http://www.ersf.ca/ersf/register_judges.php
Science Fair 2007:	http://www.ersf.ca/page3.htm
RASC Special Award:	http://www.ersf.ca/rasc.htm

By-Law Update – this is serious, folks

Krista Stefan reported at the Mar 12, 2006 Regular Meeting that the Alberta Corporate Registry (ACR) had *finally* accepted our new by-laws. This brought to conclusion a by-law drafting/approving/filing process that took well over a year and a half. On Nov 10, 2006 Orla Aaquist submitted the new by-laws to the ACR and it took until Feb 9, 2007 to actually get them filed. Why? Because, even though your Council worked diligently to draft new by-laws that met all of the stipulations of the Alberta Societies Act, there were a few changes that the ACR insisted on before they would file the new by-laws. Since the Edmonton Centre Council, National Council, and the Centre membership had already voted on the by-laws, your Council decided that it would make the required changes as long as the revisions did not alter the fundamental intent of the by-laws. Council also decided that it would report back to the membership once the by-laws were filed. Here is the report:

On filing the by-laws Nov 10, 2006 we were told that we must remove Article 4.01 (Goals). We can have goals but they can't be stated in the by-laws.

On Nov 21, 2006 we received a letter requiring the following changes:

- Remove all references to the term "Constitution". There are no provisions for a constitution in the Alberta Societies Act. We can only

refer to the word "by-laws".

- Change the term "Extraordinary Meeting" to "Special Meeting".

On Dec 29, 2006, we received a second letter requiring the following changes:

- In Article 11.01 (Auditor), change the word "review" to "audit". Our books must be audited.

On Jan 11, 2007, we received a third letter requiring the following changes:

- Clarify that the term "Councillor" holds the same position as "Director" as defined in the Alberta Societies Act. We did this by adding a definition of "Councillor" to Article 1.01 (Definitions).

- In Article 1.01 (Definitions), change the definitions of "special resolution of the Centre" and "special resolution of the Council" according to Section 1(d) of the Societies Act. This must be done because all special resolutions must follow the rules in the Act.

The by-laws, as filed with the ACR, are available on the Centre's website at: <http://edmontonrasc.com/documents.html>. If you have any questions, please contact Krista Stefan, or the By-Laws Committee (Sherry Campbell, Orla Aaquist, Luca Vanzella).

Astronomy Day 2007

Astronomy Day is once again fast approaching. This year activities are planned for April 20 to 22. Since we will be on daylight savings time, sunset is rather late at 8:40 PM. At sunset, Venus is 30 degrees above the western horizon, and the 5-day old Moon is 20 degrees higher and slightly farther south. Saturn is well placed at 50 degrees above the southern horizon. By 10 o'clock, a few star clusters should be discernible: the Double Cluster, Beehive, and M13. Since I have not been involved with Astronomy Day before, I am not familiar with the local horizons at our public viewing locations, so I'm not sure to what extent the sky will be obscured by building and trees; but if you find that you have a poor view of some part of the sky, just give me a call and I will do my best to remove the obstruction ... I know some people.

As usual, we will be hosting sidewalk astronomy on the Friday and Saturday evenings from 8:00 to 11:00 PM at Gazebo Park, The Promenade, and St. Albert Place. The Observatory will also be open during its regular hours on Friday and Sunday and Saturday. Massimo Torri is planning to set up a telescope at Velma E. Baker School at 2845 43A Ave NW on Saturday evening, so if you live nearby, you might want to drop by and give him some support. If there are other members who want to set up telescopes in their

neighbourhood, let me know so that I can include the information in our various advertising efforts.

On Saturday we will have an information table, a light pollution table, and a kids' activity table set up in the lobby of TWISE from 1:00 to 8:00 PM. During this time we will host several public presentations on a variety of astronomy topics on the Syncrude Science Stage.

This year we are combining our Astronomy Day and our Earth Day efforts. Earth Day celebrations fall on Sunday, April 22 from Noon to 6 PM at Hawrelak Park. Here we will again endeavour to set up the same three tables from the Saturday event at TWISE, as well as a plethora of solar telescopes.

If you are interested in volunteering for any of these activities, or if you have creative ideas of how to make Astronomy Day a better event, please contact your Public Education Director, Orla Aaquist, by email at aaquisto@macewan.ca or by phone at 486-8661 (home) or 497-5788 (work). If you do not wish to volunteer, we would really appreciate it if you can stop by one or more of the venues and join in the fun; be sure to bring your friends and family.

Guest Speakers

May 14:

Title: The Little RASC Centre that Could

Speaker: **Gil Self**, President of the Prince George Centre of the RASC (<http://www.vts.bc.ca/pgrasc/index.html>)

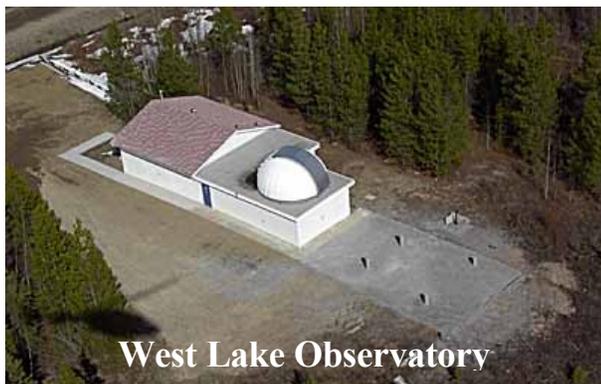
Long before becoming affiliated with the RASC, the Prince George Astronomical Society (PGAS) was an amazingly active centre serving the Prince George community. Gil Self is the current president of the Prince George Centre of the RASC as well as the long standing editor of their Centre newsletter, *PeGASus*. During his talk, Gil will tell us a little about the history of the Centre, their observatory, and community programs. The following text was taken from their public website to give you an idea of the energy that exists in this small centre.

The Prince George Astronomical Society (PGAS) was founded in 1979 and the construction of the Tabor Mountain

observatory was begun. The task took 5 years to complete by a team composed almost entirely of volunteers led by Bob Nelson. The Tabor Mountain Observatory opened to the public on September 22, 1984. The lenses and mirrors for the telescope were purchased while the telescope's body and machinery were built in the College of New Caledonia's millwright shops. The dome was constructed from an old farm silo roof. A slot was cut into it and a sliding door was fashioned to allow the telescope to see the heavens. CP air donated old aircraft bearings for turning the dome. If the Tabor Mountain Observatory was built by professionals it would have cost more than \$200,000. Instead with

the help from volunteers and donations of materials by local businesses and individuals it only cost \$20,000.

In 1988, the observatory was closed due to vandalism, thieves, and poor winter access



In the summer of 1992, construction of a new observatory near West Lake began. During the spring of 1993, the PGAS received funds from the Science Council of British Columbia to help with the completion of the Observatory. On August 6, 1993 the Prince George Astronomical Observatory (PAGO) was opened to the public.

Since the opening of the PAGO, a grant from the former Ministry of Advanced Education, Training and Technology has enabled the society to promote science education within the Prince George community through school visits, public viewing sessions and participation in special events such as Science and Technology Week and the Central Interior Science Exhibition. The PG Centre now provides regular observatory access to the general public and special interest groups such as Cubs, Brownies and schools.



The Observatory houses a 0.61 meter Cassegrain telescope, one of the largest amateur telescopes in Canada. In addition, the observatory equipment includes several smaller telescopes, two modern CCD cameras for astrophotography, several computers and lots of astronomy software, digital setting circles, an H-alpha filter and projection system for viewing the sun, laser pointer for pointing out constellations and interesting items in the sky, and a variety of eyepieces and filters to help visitors obtain the best possible view of the night sky. The observatory classroom can hold up to 50 visitors. Astronomical slides, video presentations, and demonstrations are part of our classroom activities.

June 11:

Title: Mars Desert Research Station

Speaker: **Randall Shelaga**, C.E.T., Manager, Airworthiness, Quality & Airworthiness L-3 Communications, SPAR Aerospace Limited

Randall Shelaga is a member of the Edmonton Centre and a member of the Mars Society Canada. He recently participated as the Field Engineer on the Mars Society Canada (MSC)/Mars Expedition Research Council (MERC) Expedition Three (ExThree). ExThree was a fifteen-day simulated Mars Research Mission at the Mars Desert Research Station (MDRS) in Utah.

Previously (late 2004), he participated in an MSC/MERC Training Expedition (ExAlpha) at the same facility. In his talk, Randy will describe the work being done by third party organizations (Mars Society, Universities and Corporations) at this facility in preparation for our inevitable voyage to Mars.

Captain's Report by Capt'n K

Yo ho ho and a bottle of rum....arr, now I be fit to write....

Har har, maties, scurvy dogs, rickety cats, and poxy hamsters! Ye won't be hearin' from yer President this month. She wasn't of a mind to be cooperatin' with me, so she's "tied up" fer a wee while. Now I'm at the helm of the good ship Edmonton RASCaL. I hear tell that yer ship is sanctioned by the Crown and the Legislative Houses, so it'll be easier to be slippin' past the watch.

Some of me crew is already schemin'. Me swabbie "Brown" Bruce McWordy has a crew to extinguish the street lanterns to aid in our larcenous endeavors. Helmsman Oro A. Quest be recruitin' new crew adept at steerin' by the stars. The Crown's disloyal

representative, Roy "Rum" Canteen shall be leadin' a landing party south to the lawless port o' Calgary. For all who go there'll be grog to keep ye warm on those frigid late watches and bonnie company in the light of day.

Now on to off to regain me sea legs and do some plunderin' in the balmy waters of the Caribbean then decidin' how to divvy the booty of the ill-got gamblin' gains.

I must dispatch this posthaste, but as I peruse this missive I am minded of one notion....

Thar she blows!

Occultations Schmoccultations *by Al Sterling*

A wipeout by any other name would be failure
So equipment would, were it not equipment call'd
Retain those dear imperfections which it keeps
Withholding that success. Technology, doff thy name,
And for that name which is no part of Urania
Take all my obs.

yyyy mm dd Asteroid Mishap

2007 01 21 2445 recorded a clean miss
2007 01 25 2933 turbulence caused disappearances too
2007 01 31 3116 left batteries in the cold garage; no power
2007 02 08 7995 wrong target star
2007 02 11 11846 wire from 120 to 12V converter cracked
2007 02 21 18689 I thought that **was** UTC!
2007 02 24 4565 bad tracking – Poncet was pointed south
2007 02 28 2986 couldn't locate the target in time
2007 03 04 1198 wind shifted the scope with 2 minutes to go
2007 03 08 Varsavia recorded a miss, everyone was cloudy
2007 03 11 3412 isn't it "fall forward; springs push you back"?
2007 03 24 22068 tripped on wires and pulled plugs out
2007 03 25 136 Tauri clouded over with 3 minutes to go
2007 03 25 29757 fried the VCR by reversing battery cables
2007 03 29 8851 no event
2007 03 31 5221 1 minute late pressing record button

Here's a great event coming up

2007 06 06 666 at 06:06:06 UT 6th mag star with a drop of 6 magnitudes for 6 seconds!

I have been misled, and I have been misleading you. But I'm not sorry – I saw stars; I looked through a telescope; I feel better. That was the plan.

Observers Report *by Raul Cromwell*

Gang Astronomy

Astronomy is going through one of its most challenging times as society changes and the astronomers are forced, due to economic conditions, to form gangs. Edmonton is not immune to this trend as our fair city has some very active astronomers. Below is a listing of some of the gangs Edmonton is threatened with.

SunBlockers

Probably the least known and smallest gang is the SunBlockers. These are astronomers looking at the Sun. They are not very well educated as most are counting sunspots. The problem is that they don't know how to count. Somehow a group has a value of 10 and only then are individual spots are counted. This means a single spot on the Sun has a value of 11. The SunBlockers have no concept of the numbers between 1 and 10. Many have real troubles balancing their chequebooks. Most can be identified since they have layers of SPF 500000 sun block on their bodies. Many are found studying their star charts so that they can star hop to the Sun. Many gave up on star charts and use goto telescopes instead. Their colours are Yellow and Blue.

Occultationists

This is another small gang that is well established in the Edmonton area. Yet this group seldom stays in the Edmonton area, as they must travel to the occultation sites across Alberta. In this way they are one of the most nefarious gangs as they spread their influence

over a large area. Most are heavily armed with medium to large aperture telescopes and low light cameras. They can be easily identified because they carry an average of 67 large batteries. Their symbol is a white dot on a white dot.

Mooners

Better described as a cult rather than a gang, this group, actually seek the light. They are armed with all types of telescopes so are not easily identifiable that way. Their goal is to shrink the pupil of their eyes as small as possible. Those with large aperture telescopes achieve this with greater efficiency than the smaller scopes do. Many are hooked on the larger apertures as they claim they can see more detail on the Moon. This is a lie as the truth is they believe they can achieve nirvana better with their shrunken pupils. Many families are torn apart by the activities of the Mooners. Unfortunately intervention is the only known cure. Their symbol is a brilliant light behind a small black dot representing the ideal pupil size.

Grazers and Eclipsers

What happens when you breed a Mooner with an Occultationist? You get a grazer. In the worst case you could also get an Eclipser. Grazers are not satisfied with just small pupils but it is also required to see stars brush up very close to the moon. This gang exhibits the worst traits of both the Mooners and the Occultationists. They will travel far and wide across this province

thus spreading their influence over a large area. Since they are looking at the moon the pupils are smaller as well. Nirvana is achieved when the exit pupil gets so small the star suddenly blinks out. The worst of the grazers is a small subset known as eclipsers. These are the most widely traveled group of all and have worldwide influence. They also have the funds to back up their nefarious plans. Most have telescopes of smaller than average aperture. This group is responsible for the destructive influence of the travel telescope. The travel telescope was designed to carry on an airplane. This has created lots of security concerns as customs agents have no idea what these devices are. The colour for grazers is an invisible dot against a bright background. The eclipsers symbol is simply the dollar sign (\$), indicating their intention take over astronomy by economic means.

VarStars

Another small gang gaining a foothold in Edmonton. This group is well spread out and is not well established. Most are observing individually in isolated locals and therefore are not as great a threat to society. Occasionally though they do get together for coffee and other beverages. That is when they make most of their plans against society and societies lawful and reasonable use of lights everywhere. Their symbol is a variable dot against a dark background.

Planeteers

Unlike Mooners, planeteers are obsessed with detail. Most are also financially wealthy as the only telescope that is ideal to observe the planets with is a 20-meter long refractor with a minimum of 70 lenses in the optical path. The idea is to fleetingly see a small smudge against a bright dot. High powers are usually required to see this smudge, so while the planeteers are not as prominent as deepskyers (see next paragraph) they do tend to hold the balance of power. It should be remembered that the smudge on the bright dot is nothing but dirt on another planet. Thus the symbol for the planeteers is dirt.

DeepSkyers

This is by far the largest and most dangerous gang of them all.

New Members Report by *Lou Costello*

Neil Martin has a 12" Dobsonian but has done little observing with it this winter due to the cloud cover. He is very interested in the Blackfoot Dark Site as he lives in Sherwood Park ; he feels that some help with his telescope is in order and looks forward to meeting more experienced observers at the Dark Site. He is not able to get to meetings due to work commitments.

Michael Shogren has a pair of binoculars and is finding his way around the sky. He has no plans at the moment for buying a telescope and wants a better idea of what would meet his needs

California Dreamin' by *Rabbit Warren Finlay*

It is a fact of life in Edmonton that for most us, dreams of warm vacations become increasingly seductive the longer that winter plods on. Given that our snow cover arrived Oct. 15 last fall, anyone other than a masochist is likely wishing for a break from a winter that is approaching the six month mark. Sure, winter observing can be great, with nice long nights, no mosquitoes, and few people out at night to shine unwanted lights on you. However,

Many are armed with large aperture telescopes. Large portions of them are also armed with extremely dangerous items such as Panoptics and even Naglers. Many of these eyepieces can grow to have dangerous masses associated with them. Often the initiation ritual requires that new members complete their Messier observations. This is often followed by members completing their Finest NGS's. They can also choose to observe several other lists such as the Caldwell objects or the Herschel 400. Whatever the list, the eventual goal is for the observer to be happy by not seeing anything. As objects get fainter and fainter they eventually become invisible. Many a deepskyer has left the observing site extremely happy that he has not seen a thing.

Extreme care must be used when approaching a deepskyer, especially if you have a light on. It is best to sneak up on them, thus all lights should be extinguished. Failure to do this could have the effect of those massive Naglers being thrown at you. At a minimum you will have to endure the wrath of a group of deepskyers. This is not a situation anyone would want to be in.

There are also many subsets of Deepskyers. Most prominent are the photoguys, the dobbers, and the goto-ers. There is often friction between these groups. Dobbers and goto-ers do not like the photoguys as they believe that the only good photon is an observed photon. Yet even dobbers and goto-ers do not get along. Dobbers believe that starhopping is the only way to learn the sky and that goto-ers are cheating. Goto-ers believe that computerized telescopes are the way of the future and that dobbers have so little technical abilities that they need technical support to turn on a light switch. In any case it is not recommended that you do turn on the afore mentioned light bulb in the presence of any of these groups whether you have the technical ability or not. The colours of the Deepskyers are black on black.

As you can see Edmonton has some very serious astronomical gang problems. The only solution is to throw money at it. Therefore I have set up a fund in my bank account to combat this threat. Please support an astronomical gang free Edmonton by sending in your donations.

before he does.

James Watson also has a pair of binoculars and also has no immediate plans to rush out and buy a telescope. Although he lives in the City of Light Polluting Champions he looks forward to getting away to Pigeon Lake this Summer and experiencing some dark skies .

To all our new members, *Cead mile failte* (a hundred thousand welcomes)

a few nights of above freezing observing isn't too much to ask, is it? I decided this was a reasonable request, and since fulfillment of such a request didn't appear likely to happen anytime soon in Edmonton, I took matters into my own hands and extended a work trip to manage three nights of weekend observing in California during the March new moon.

Given my Scottish heritage, to keep costs down I chose to camp rather than stay in more expensive accommodations. Campgrounds are not an option since this is spring in California and campgrounds tend to be quite busy, meaning lots of intruding lights at night. My solution was to take my backpack and haul my gear into a site about a mile off the road into the hills of Henry Coe State Park about 60 miles south of San Francisco. Arriving around 5PM on Friday after some delays with the maddening Bay Area rush hour traffic, I checked in with the rangers and reserved my backpacking spot for three nights. This park has a policy of only allowing one reservation per site, meaning I knew I wouldn't be bothered by other backpackers arriving with flashlights and other night-vision-destroying lights. Loading all my stargazing gear, including my 10" reflector (a collapsible truss tube Genstar reflector) into my pack gave rise to some interesting looks from campers nearby. Fully loaded with my 90 pounds of gear on my back (about half of which was astronomy gear), I lumbered my way along the appointed trail to my campsite. About 20 minutes in I realized I ought to be there by now. Checking the map, I realized I had taken a wrong turn, and so headed in the correct direction, arriving at camp with my sore shoulders calling me an idiot for missing the turn and subjecting them to twice as much punishment as necessary. The pain quickly subsided though, assuaged by views out to the Sierra Nevada 140 miles to the east and the ocean 50 miles to the west, as smells of oak and madrone trees and carpets of wildflowers at my feet competed for my attention.



Sierra View Camp, Henry Coe State Park. Note my tent, bottom right corner.

After devouring a stove top supper in the fading light, I began observing at astronomical twilight in balmy, calm, double digit

temperatures. After an initial burst of energetic enthusiasm, the long day of travel began to take its effect and a nap was in order. Awaking to the sounds of western screech owls, an hour later I was back at the eyepiece for another burst of photons. Fading again late in the night, another power nap and then observing until my travel-weary bones said enough, I hit the hay just before dawn, having tracked down 50 or so deep-sky objects from my prepared list.

Awakening to the unbearable heat of the sun shining on my tent, I stepped out in shorts and t-shirt to have breakfast with a million dollar view of rolling foothills as far as the eye could see. Wanting to be tired enough to nap in the late afternoon in preparation for another long night of observing, I decided a good day of hiking was needed. About 20 km later, with 1000 m of climbing up and 1400 m climbing down, and still 5 km and 400 m left to get back to camp, I realized I had bitten off more of a hike than I really wanted. Fortunately, a ranger came driving along the fire road I was on and happily agreed to give me a ride back to my camp. Thanking my lucky stars, I was soon devouring my couscous pilaf while preparing for what the skies promised would be another wonderful, but breezy, clear night of observing. Another 50 deep-sky objects and the wee hours of the morning saw fog rolling below, winking out the lights in the valley like some magical blanket being pulled up for the night. The effects of my overzealous hike, plus the onset of early symptoms of a rhinovirus, dictated that bed was warranted and I complied.

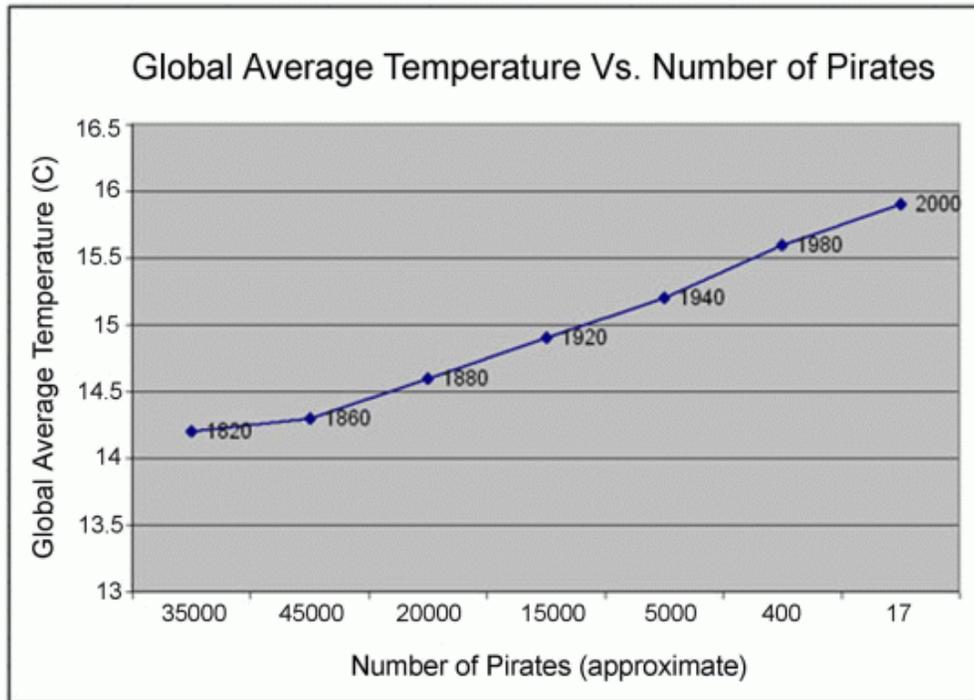
Hacking and wheezing my way through the night, in the stark light of another bright sunny morning I decided a day of rest was needed, and lazed about camp taking photos of the many blooming wildflowers, reading, and walking back to my car to refill with water. Cirrus clouds threatened to ruin the oncoming night, but a call home showed the clear sky clock giving me clear skies until at least 11PM. Waiting for the cirrus clouds to clear, I started a Messier marathon at dusk, but 15 objects in, the cirrus was gone and I went back to my prepared list of dim deep-sky objects. With my body fading in its fight with the invading cold virus, it took until about 1AM before I completed the last of my planned 130 deep-sky objects, happily collapsing into my tent with fog again filling the valleys below and making me glad I had chosen to make camp above fog line.

Reversing my steps in the morning, I reluctantly said goodbye to California, being treated to a 24 hour old new moon from my airplane window. Having quenched my winter-driven wanderlust, I was happy to be home in cold, blustery Edmonton, knowing that Dorothy in the Wizard of Oz was right: "there's no place like home", although I would add: "especially if you can manage a few nights of warm weather observing during winter".

How To Solve All The World's Problems

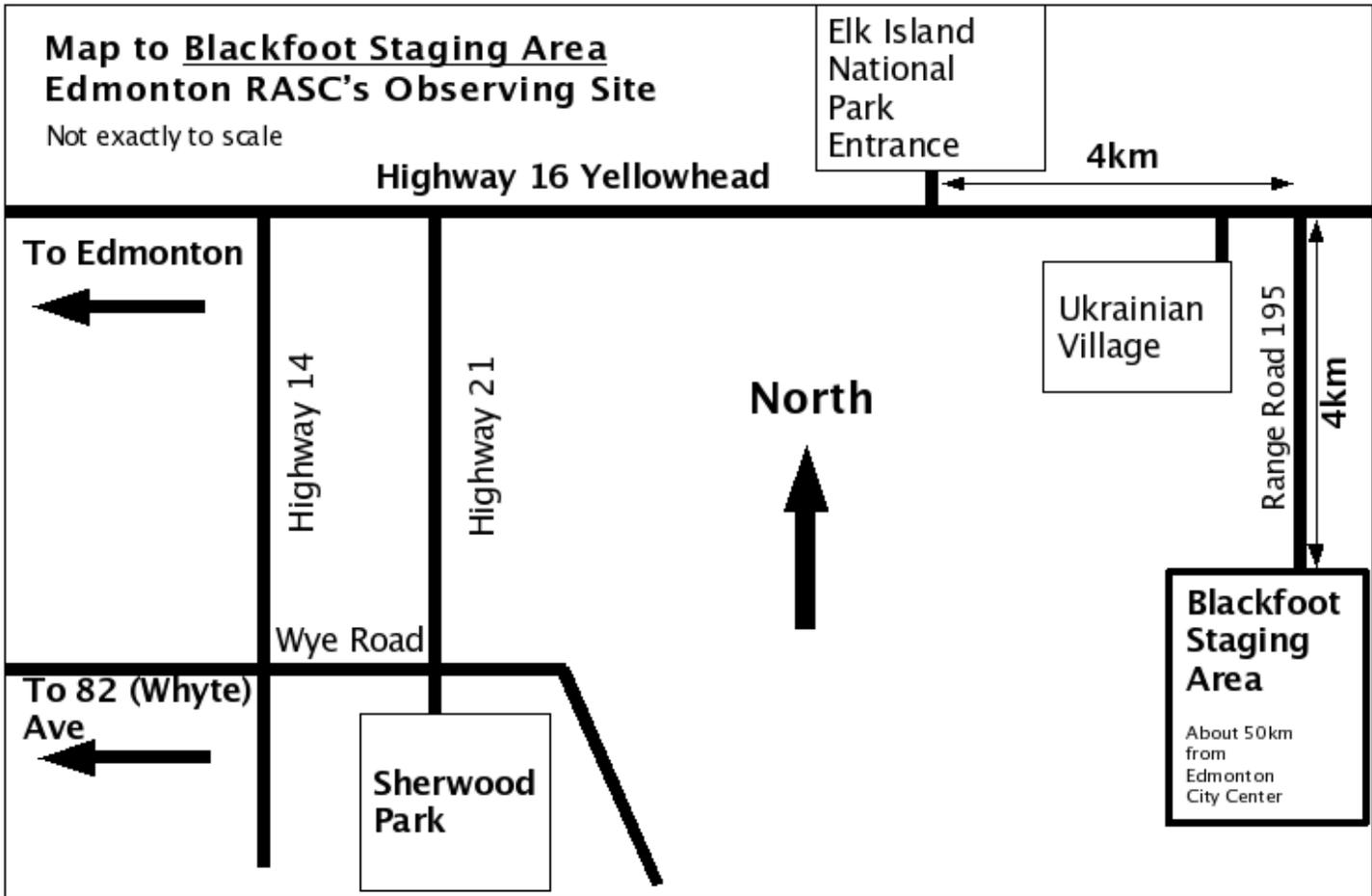
Note: this article is written in special ink which only geniuses can see. It's brilliant – ed.

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