

Hummingbird Flight to Fuchsias, by Lucky Budd, June 1, 2021

The Birding Habits of Night Owls

As you can see by the subject matter of the cover photo and some other content in the following pages, this issue of *SkyNews* is for the birds. It's the kind of thing you might expect from the July issue, where we're taking a look back at the not very much darkness around the Summer Solstice, while still lamenting the fact that we're in the process of crawling our way out of the solar minimum. So, birds it is then.

My own birdwatching was just part of living on a partially forested yard in North Saanich. On most evenings I can hear the barred owls or great horned owls, but never both at the same time in the same place. Once the great horned owls begin their booming calls or the strange begging sounds made by adolescents to their mother, the barred owls know to be elsewhere and be quiet about it. In the summer, with less hours of darkness to hunt in, you're more likely to be able to see them by daylight, usually having a nap on a fence post or tree branch, in preparation for a night of hunting. You often hear the presence of an owl in daylight before you see them, by the shrieking sounds of robins, which will attack the sleepy owls to drive them from the area of their nests.



California Quail on Over Watch, by Bruce Lane, June 4th, 2021

There is a gang of robins of unusual size that are frequently seen in the yard. Some of the robins are big enough that you do a double take, thinking that you just saw a small hawk. From my desk I have a close up view of a stand of plum trees where small birds like to perch, when they swarm into the yard, or zip through in pairs or small groups. I keep an 8X monocular beside me at my desk and pre-focused for the tree branch they're most likely to visit, to have the best chance of seeing them before they move on. It's a continually changing landscape of house finches, sparrows, wrens, chickadees, various hummingbirds, dark eyed juncos, and one of my favourite small flyers: the American goldfinch. I don't put out food for the birds, except after a heavy snowfall, since the yard has a lot of menu options for them already and they can drink from the small pond. During the Pandemic, I decided to try to learn more of the names of the small birds that have been visiting me for years and purchased some books on the subject. I always like to keep at least one small brush pile intact over the summer for small birds to hide in and don't do any excessive brush clearing until nesting season is done or I've checked to ensure nobody's home. The chickens treat small birds roosting in the coop or eating their food as their pets. More than a few times, I've opened up the chicken coop in the morning only to be greeted by a tiny bird who took refuge inside for the night. One family of sparrows made a nest in a folded up chair that's beside a bench. When I sat on the bench, I'd have a sparrow staring at me impatiently, with a bug in its beak. It wouldn't bring its catch back to the nest until I turned away, to preserve the mystery of its nest that was only a few feet away from where I would be sitting. This behavior went on for a couple of weeks, until one of the less than welcome neighbourhood cats discovered the nest one night. I'll probably hang up some less accessible bird houses for next year.

There is almost always a family of California quail in the yard every year and this one was no exception. They're very small and personable birds, who spend most of their time walking briskly around the yard, but are surprisingly good at flying when they feel it's necessary. The brightly plumaged male spends a lot of the time perched on a good vantage point, to watch for danger; while the less colourfully feathered female and the tiny puffball chicks scour the yard for food.

They're the one bird too adorable to get scolded or chased out of the garden. I just tell myself they're only eating bugs and *certainly* not helping themselves to any green groceries. The garden usually has one throwaway row sacrificed to the birds in the hopes that they'll leave the rest alone.

I live in an island of trees in the mostly open fields stretching between the airport and Elk Lake, which I refer to as *Raptor Alley*. It's a favourite hunting ground for eagles, hawks, falcons, and even the odd osprey. It would be a going concern for the chickens, if it wasn't for the fact that the daytime skies around here have been claimed by the ravens. They can be quite loud, but the sound always reassures me that they're in control of the airspace overhead. I still have overhead netting over the chicken pen, to protect them from the odd interloper.

Joe Carr has been closely watching birds for most of his life, both locally and during his travels. He had the following to say on the subject:

It's debatable which of my passions came first when I was a child, natural history or astronomy. I think my mother's bird feeders were the start of my interest in understanding how birds and animals depended on the natural systems for survival. Despite bird feeders not really being part of that cycle, the birds that used them flew in from nearby Somenos Lake and marsh, where a huge variety of birds and animals prospered. Observing birds has always been a part of my life, and when my interest in astronomy bloomed, thanks to my passionate Grade 6 teacher, I had two natural systems to record and keep track of. Later in life, when I rediscovered astronomy, I quickly realized that the two fields of endeavor complimented each other in several ways.

Both birding and astronomy require keen observational skills, and since I have a terrible memory, this meant I had to keep logs if I had any hope of remembering observed celestial objects and what birds were up to in their habitat. I have been fortunate to travel to many parts of the world, so both my celestial observations and bird list are perhaps a bit more eclectic than some of my buddies who don't get that opportunity. That said, perhaps my most serendipitous bird observation is of the common pochard, a single male duck which, from all accounts, flew across the Pacific Ocean from Asia and decided to make the Smith Hill Reservoir his home last winter - a 10-minute walk from my house!



Using optics to assist our poor human vision is the most obvious way both birding and astronomy converges. I regularly use my Canon IS binoculars to observe both celestial objects and feathered friends, who can both be hard to find and observe without good optics! Using long focal length, high quality lenses on my cameras is equally rewarding for capturing both birds and nebulae. There's nothing like a good photo of what you observed to explain context, record the moment, and hopefully refresh a 30-year old memory!

My observations of both birds and celestial objects are online - click on the link, then select "View":

Bird observing log - https://www.evernote.com/pub/joetourist/birds

Astronomy observing log - https://www.evernote.com/pub/joetourist/astroobservinglog

Whether you are a new birder or experienced, I recommend Cornell Labs:

All About Birds - https://www.allaboutbirds.org

Merlin - their bird identifier and logger (available online and as an app)

For Dorothy Paul, it's a similar story of interweaving the interests of astronomy and bird watching in her travels, as well as at home. Since the Pandemic started though, she's had to be content with enjoying both hobbies from Victoria.

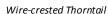
The year 2020 will always be memorable for us as the year we could claimed two Birds of the Year each, one per

hemisphere. On January 1, it was the gorgeted woodstar for Miles, the wire-crested thorntail for me. These hummingbirds were the first birds each of us saw at dawn on New Year's Day, while each making our way to breakfast at Wild Sumaco Lodge in Ecuador, followed by a full day birding on the upper slopes of the Amazonian rain forest. A week late, our first morning home in Victoria, I rolled up the kitchen window shade to behold a handsome fox sparrow serenading us from our backyard, while Miles spotted a chestnut-backed chickadee. Neither quite matched Noah Stricker's First Bird of 2015, on New year's Day, as he commenced his record-breaking year of observing 6042 birds before midnight the following December 31st *. But our southern hemisphere beauties were extra special because they were at the top of our list of the had hoped to see on this trip. Needless to say, our Birds of this year, 2021, were both



Gorgeted Woodstar

(above)





and both local favorites. Mine was a handsome male towhee; Miles' was again a chestnut-backed chickadee.

By early March 2020, we were forced to acknowledge that our planned observing trips south for the next 6 months, to our Death Valley camp and telescope site later in early April and our high elevation site in the White Mountains, California, in May or June, were out of the guestion. Wishful thinking about a fall or early winter trip sustained us for a while, but by midsummer our hopes were fading rapidly... Meanwhile, we had come up with a new birding game: First Bird of Day. So it was out of bed, coffee brewing, window shades up, to see which of our local friends we would see first in our backyard. This morning (July 15, 2021), the house finch I saw, surprised me because, although familiar residents year-round, they usually arrive at our hanging seed feeder later in the day. More often, the early-bird spot is claimed by a chestnut-backed chickadee, red-breasted nuthatch, Anna's hummingbirds, or dark-eyed junco. Lately, 2 young Anna's Hummingbirds are often sparring with their aggressive, territorial father, who we call Andy, when they meet at the feeders. Miles' this morning and mine two days ago, was also unexpected: a boisterous band of bushtits swarming around the hanging suet rack, a sighting that marks the progress of summer. Their young are fledged and until next spring flocks of these charming, diminutive birds can be spotted wherever there are bushes, ocean spray being one of their favorites. The disappearance/re-appearance of other Island residents, who move to the woods to breed and raise their brood, are better indicators of the changing seasons. Of these, golden crowned and song sparrows are perhaps the most reliable in our yard. The more definitive markers of the passage of time, however, are the long-distance migrants who stop over in our yard for a few days on their way north in the springtime and then south in the fall. Bright yellow Wilson's warblers, the male with a jaunty black cap, are almost regulars for a day or two. A Pacific slope flycatcher, a new species (for us), made



Pacific Slope Flycatcher

its appearance last fall and hung around a couple of days (photo left). These pretty birds, with a distinctive song, are unusual on the east side of Vancouver Island according to the distribution map in "Sibley's Field Guide to Birds of Western North America" (2003), which shows them only along the outer coast, where their name implies they should be.

When no birds are in sight, or even talking in the bushes, we know an occasional visitor and year-round resident has stopped by – a Cooper's hawk (seen below).

Shortly after it has departed, the 'all clear' call is given, and our littler feathered friends reappear. They ignore another

large, occasional visitor, as the barred owl is staring through the window behind Miles' computer, while Miles was taking a picture and I snapped the scene (seen right).

After dark, Noah Strycker's engaging true tale * can transport you off the Island on a journey to places you may not have even heard, adventures you never dreamed of all, and glimpses of our beautiful blue and green planet; a reminder of how friendly members of our two-legged species can be to others arriving from afar.





Cooper's Hawk

Barred Owl posing for photos

* Noah Strycker Birding Without Borders – An obsession, A quest, and the biggest year in the world. Houghton Mifflin Harcourt, 2017

Photo credits:

Gorgeted Woodstar - Jeremiah Trimble, eBird; Wire-crested Thorntail - Willie Perez, our guide; others -DHPaul

We're very fortunate to live on the Saanich Peninsula, for more than just the mild weather. As long as there are places like Swan Lake and the Esquimalt Lagoon, there will always be places you can go in the local area where you can do some serious birdwatching beyond your own yard. If you're looking for the *go big or go home* birding experience that tiny yard birds aren't giving you, there's always The Raptors centre up in Duncan, where you can visit some of the larger birds of our region or pay a bit more to have the full falconer experience of having a raptor land on your arm!

Bruce Lane

Editorial Remarks



I'd say it's not the heat, it's the - but it's pretty clearly been the heat that was the big story in Victoria at the end of June. Hopefully, none of you melted like the *Wicked Witch of the West*. I was pretty thankful of the air conditioning function of the heat pump, but tried not to over tax it. I had the feeling that if it exploded it could be a very long time before I saw the arrival of any overworked repair person. Prior to getting a heat pump installed, to beat the heat I used a homemade air conditioner, by mounting a fan, face down on a Styrofoam cooler filled with ice and blowing cold air out into the room through a pipe. It's nowhere near as good as a proper air conditioner, but it makes you feel satisfied that you at least tried. Even with the AC, I spent a lot of the day moving around the house, closing and opening drapes, to regulate the house to something bearable, while sitting under a big ceiling fan. I also had to take some care to prevent my chickens from becoming roast chickens.

A lot of the province is not unexpectedly on fire, with firefighting crews being pushed to the limit, and the town of Lytton destroyed. As I'm writing this, fire crews are fighting wildfires near Kamloops, with many people being evacuated. It seems like it's only a matter of time before the winds change and this *green and pleasant* corner of the province is once again blanketed in smoke, raising our awareness of the plight of our fellow British Columbians. But not yet, so enjoy the summer while you can, both with and without your telescope.

In this issue of *SkyNews*, we'll have more recaps from our Centre's activities, more images from the Apollo 15 mission as we continue to celebrate the 50th anniversaries, as well as all the astrophotography and articles you've come to expect from the *Victoria Centre SkyNews*. There will also be pictures of birds and articles about birding. Did I mention the birds?

Bruce Lane: SkyNews Editor

President's Message for July



Do we ever get tired of the view?

I recently picked up my niece from the airport. When we got our first sight of the Olympic Mountains towering over the Juan de Fuca Strait, she asked if people in Victoria ever get tired of the view. I don't think so.

Similarly, I observe that amateur astronomers just don't get tired of looking up. The beauty takes our breath away. There is a joy in learning the constellations and getting competent at star hopping. There is the awe in learning more about the processes that produce the spots and *fuzz-balls* in the night sky. I never tire of improving my knowledge of the craters and mountains on the Moon, but often I just wander about the Moon in my eyepiece, appreciating the view. We keep improving our equipment, trying to see that little bit of extra detail. Why? For the joy and sense of accomplishment.

At the Astro Cafe this week, we hosted two distinguished selenologists. Gary Varney, from Florida, is a renowned lunar astrophotographer who waxed eloquent about the details he loves to watch at the terminator – the line that separates day from night on the Moon. Brian Day, from California, leads a program at NASA that presents map and data portals, available for free on the Internet, of the planets and moons (https://trek.nasa.gov/moon/). Brian told us that he enjoys ending his day by flying around over the Moon with Moon Trek, enjoying the view and trying to figure out how features were formed.

We had dinner guests this week, and I got to show them the young (27 hour old) moon through the 8 inch Dob I'm borrowing from the club (Nelson Walker's old telescope). One guest had never seen the craters on the moon and got wonderfully excited. Do I ever get tired of the view? Not at all. It feels as fresh and exciting as when I first saw the craters when I was 8 years old.

Look Up,

Randy Enkin, President @Victoria.RASC.ca



Apollo 15 mission training by back-up crew members Dick Gordon and Jack Schmitt, July, 1971

Special Interest Groups

Getting Started in Astronomy

Members of the group are exploring what kinds of telescopes have to offer and alternatives to GoTo systems. Variable star observation was briefly described and anyone with an interest in this form of citizen science should contact David Lee at david@victoria.rasc.ca

Astrophotography

The Astrophotography SIG reviewed what is required for planetary imaging and what filters and atmospheric correctors can do for improving results. The group continues with discussions around image processing primarily with *Pixinsight*. David Payne has provided access to raw files so members can try processing some objects he has captured. For more information, contact John McDonald *john@victoria.rasc.ca*.

Electronically Assisted Astronomy

The EAA group continues to provide imagery to the FDAO Virtual Star Parties. There was some discussion about the upcoming star party focussed on astrophotography. Equipment for EAA continues to be in short supply accompanied by long wait times. For more information, contact David Lee at *david@victoria.rasc.ca*.

Makers

The Makers SIG continues to focus on member projects. Discussions include modifying telescope drives, focus motors, and observatory automation. Next meeting we will talk about encoders and push-to systems. For more information, contact Jim Cliffe at *jim@victora.rasc.ca*.

David Lee

Astro Café: Continues Online



The weekly social gathering of amateur astronomers on Monday nights, known as Astro Café, has been continuing online for over a year and other than some holidays, without pause. As with many groups out there, we're trying to find ways to still function, without meeting in person. Members are posting their astrophotography, short articles, as well as links to astronomy stories from the Internet. Sadly, you'll have to make your own coffee and the only cookies are those your browser picks up when you visit our website. For those unable to take part in the Monday night Zoom sessions, Joe Carr has made them available to watch on the RASC Victoria YouTube channel. You can access the *Virtual Astro Café* at: https://www.victoria.rasc.ca/astronomy-cafe/

The first Astro Café of June was hosted by Chris Purse and he showed Lucky Budd's daytime image of Jupiter that was published in a local newspaper (*Ed. another of these Jupiter images can be found later in this issue*). Chris Gainor discussed the upcoming RASC National General Assembly in June and showed a few Apollo mission pictures; Randy Enkin gave a talk: *The Sun and Stars*, about his dad's interest in the Sun; Chris Purse and Dave Robinson discussed CRD lighting of Galloping Goose Trail that will add to our region's light pollution; and then Dave Robinson went on to give an update of the work being done on the mount for the RASC Edmonton Observatory. Lauri Roche talked about upcoming FDAO events; Reg Dunkley highlighted Diane Bell's astronomy estate items and other items for sale on the RASC Victoria Buy and Sell, as well as talking about Juno orbiting Jupiter; and Joe Carr gave a review of the 2012 Transit of Venus.

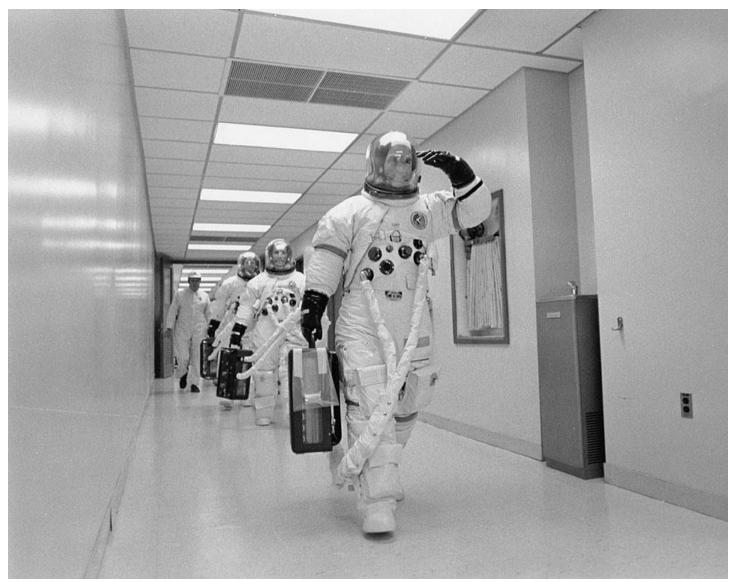
The second Astro Café kicked off with Chris Purse and Randy showing photos from the recent Annular Eclipse taken elsewhere; Dave Robinson gave an update on meetings with the CRD, regarding the lighting of the Galloping Goose Trail and showed some images from RASC Edmonton; Chris Gainor talked about the upcoming RASC General Assembly and Annual General Meeting: Alex Schmid showed some photos of the RASC Victoria Library; and David Lee gave a Special Interest Group update. Reg Dunkley talked about the Juno mission; Cameron Burton showed the ongoing work to get his recently acquired Bill Almond Observatory operational again; and Lauri Roche talked about the upcoming Saturday FDAO events.



Chris Purse introduced the June 21st Astro Café, after some discussion about RASC Victoria's Zenfolio and YouTube video channel. Chris Gainor talked about the upcoming RASC GA; Malcolm Scrimger discussed Geocaching and Public Outreach for Astronomy; Randy talked about the Summer Solstice; John McDonald talked about the upcoming Astrophotography SIG meeting; Brock Johnston showed some RASC Victoria images; Dave Robinson displayed more photos from RASC Edmonton; while Laurie Roche talked about FDAO events and announced that she has purchased Diane Bell's astronomy equipment estate.

The last Astro Café in June featured a review of the recent RASC GA and AGM; Dave Robinson showed more images from RASC Edmonton; Chris Gainor talked about the *Trouble with Hubble*; Randy showed images of Saturn and Jupiter with the Full Moon; and Reg Dunkley announced to the melting masses that the excessively hot weather is ending.

Bruce Lane



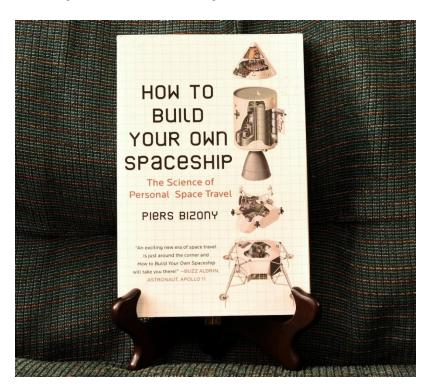
Apollo 15, Dave Scott leads Jim Irwin and Al Worden down the corridor after suit-up. July 26, 1971

From the Library

The RASC Victoria Centre Library is housed in the Astronomy Department's faculty lounge, located on the 4th floor of the Elliott Building, at the University of Victoria. It contains over 500 titles, curated by Alex Schmid, our RASC Victoria Librarian. Alex is currently running our library in the same way the Greater Victoria Public Library runs its shut-in branch, generously donated his time to drive around doing deliveries and pickups for our membership, to provide access to books from the collection. The list of available titles can be found in the resources section of the RASC Victoria website. For more information and to make a book delivery request, please contact Alex Schmidt at: *librarian@victoria.rasc.ca*

Our library covers many aspects of astronomy: observing, astrophotography, telescope construction, space exploration, astrophysics, and much more. Normally, the library is opened up during the social gatherings in the faculty lounge, after our monthly meetings, with coffee, juice, and cookies provided by our Centre. In the past I've been doing book reviews of the contents of our Centre's library, but until the resumption of our monthly meetings at the University of Victoria, I'll be doing reviews of the astronomy books from my personal library, ones that can be purchased online or better yet at your local bookstore.

This month we're taking a look at *How to Build Your Own Spaceship*, by Piers Bizony. Bizony is a science journalist and author who has been publishing books on astronomy for nearly thirty years. His works cover the gamut of space exploration and missions; including a book about the filming of Kubrick's *2001* movie.



Who hasn't rummaged around in their garage or garden shed and thought: I wonder if I could build a spaceship with some of the junk in here? OK. Not everyone then. How to Build Your Own Spaceship is a nuts and bolts instructional guide to what you will need to build a spaceship and the technical issues you will have to deal with along the way. It scales up from the challenges of backyard rocketry all the way to putting together a commercial passenger or freight service. It's a thoroughly enjoyable read, with a great deal of information about the technical side of space travel dispensed with humour and good writing. This book is filled with anecdotes about both the history of space travel and the aerospace commercial industry. The only thing lacking is an index, so you might want to take some notes if you're planning to use this book for reference material. How to Build Your Own Spaceship is excellent read and it's available by order from your local bookstore.

With the fact that this book was published in 2009, it's a view frozen in time. This includes in depth discussion about the project to build a larger version of the Soyuz spacecraft, to carry additional freight and passengers. The Kliper project required the help of both the European Space Agency and JAXA (The Japanese Space Agency). Like many ambitious projects in aerospace it ran into funding and cooperation issues, resulting in Kliper being indefinitely mothballed. For the relevance of this book today, you need look no further than Virgin Galactic's recently successful passenger mission to the edge of space. A day after reading the importance of attention to details, like having celebrity astronomers on the ground to interact with people taking a ride into space, Chris Hadfield was the guest speaker at a ceremony where he pinning astronaut wings on the returning pioneers in civilian space travel.

Bruce Lane



Apollo 15 clearing the tower.



Apollo 15: Photographers and tracking camera operators watching Saturn V Launch

Birding and Astronomy

July as birding month, a timely idea as the Sun rarely sets but it is just as quiet in the fields as mating has produced its crop of chicks, now well fed and fledged. The comings and goings of the parent (or parents if you are lucky enough to be the right species) stuffed with the readily available worms of spring have stopped. The heat drives the many up into the hills, making local birding a case of all the usual suspects. Hope drives many to continue searching and the rare bird offers itself up having been blown in from Europe or Asia, and having been spotted can assure itself of a large crowd of

harassers equipped with all manner of expensive equipment and long lenses designed to confirm their life lists.

There are avid birders amongst the RASCals community. Elements common to both birders and astronomers are a keen interest in the natural world, a willingness to share experiences, and experience coupled with a welcoming attitude to newcomers. Barriers to entry are low in both cases. Both groups share a desire for the socialisation that accompanies mutual interest. Perfection in both hobbies can be ridiculously expensive.

In my case, an interest in photography, travel, and general science drove me to use eclipse travel as an excuse to do the above. A somewhat faded remembrance of a solar eclipse as a child in Manitoba provided an excuse to travel in retirement. In each case, bird photos populate the





eclipse experience. The 2005 eclipse in the South Pacific mixed 30 seconds of totality with all the birds you could imagine at sea, on Easter Island, through the Andes, all the way to Machu Picchu. The willingness of most to share in both disciplines was most acutely demonstrated by a now famous eclipse photographer Miloslav Druckmuller. Donna-Lee and I were assigned to a table on a cruise ship where he sat with a friend. After introductions, he asked if we were veteran eclipse chasers. He allowed, as he was testing some new software, to show realistic totality, capturing everything from the darkened side of the moon to the outermost corona and distant stars visible during totality. He left to his cabin and returned with some of the most stunning eclipse photos anyone had seen up to that time. Several Sky and Telescope employees were nearby. Upon seeing the work, they more or less "lost" it. As many of you know, Dr. Druckmuller is no longer a little-known professor of mathematics in eclipse circles. His work is acknowledged as cutting edge. In birding circles it would be like casually sitting down to discover your seatmate was J.J.Audubon (without his shotguns),

who was willing to show you everything he had experienced.

Photography links the disciplines. Getting credit for seeing a rare species increasingly requires either a photograph or an audio recording (or both), unless there are recognised and experienced birders in attendance. The increasing numbers of people seeking the outdoors, as an escape from doom scrolling through the Pandemic, has undoubtedly increased the number of unverifiable sightings of rare birds. This is akin to standing on a hill attempting to spot comet Neowise in the twilight, while elsewhere on the hill another spots a contrail, records it on their cell phone, and quickly leaves the area, claiming success.

A telephoto lens, when mounted on a tracking mount is capable of decent astrophotography. Simpler and more satisfying

results come from wide angle shots. Birding almost demands long telephotos and considerable shake control, though birds in their environment make decent subjects. Capturing 50,000 penguins is best accomplished with a wide angle lens. Binoculars are common to both pursuits. You can employ your lightweight \$3000 Zeiss, Swarovski, or Leica binoculars at night, but they sacrifice light gathering power for other characteristics. Better to maximize the objective to find the object. Spotting scopes with substantial lenses are effective, as there is no problem with flipped or inverted images.

The Victoria area has innumerable birding locations. Swan Lake, Panama Flats, Rithets Bog, Island View Beach, Witty's lagoon, Esquimalt Lagoon, and the points: including Cattle point, a noted dark sky location. Many of these locations offer near unobstructed views of the horizon, allowing birding by day, astronomy at night. The attached photo links the two (seen right). As the crescent moon sets, owls prepare to mate.



I am a casual participant in both astronomy and birding. To be considered a "birder", one is expected to have considerable knowledge of species, songs, flight patterns, and seasons wherein a particular species might even be passing. Below that level are the bird watchers, those knowing a basic bird list and capable of helping others identify species. Then there are the bird photographers, of which I count myself a member. I regard "focus" as a prime consideration before composition, lighting, and other issues. I am perfectly capable of processing and printing a perfectly focussed bird, before misidentifying the thing, which never quite looks like it does in the reference books. That being the case, there is the social aspect, clean air, sunshine, with light exercise, and a little conversation thrown in to complete the package. I count many birders as friends; in many cases without knowing last names, children, wife(s), grandchildren, dogs, and cats and I am pretty much down with that.

One does not need to understand more than about 50 words of a foreign language to enjoy a trip to said country. The nuance of language is lost, but the enjoyment of the views coupled with the generosity of most peoples is the reward for trying it on their turf. As it is in travel, it is in amateur birding and astronomy. Both have a low barrier to entry, with an extremely high cost to achieve perfection.

A copy of Sibley Birds and The Observers Handbook linked to online resources gets you into both pursuits at whatever level you can or wish to afford.

Michael Webb

Hill and Dale (Observing on the Island)

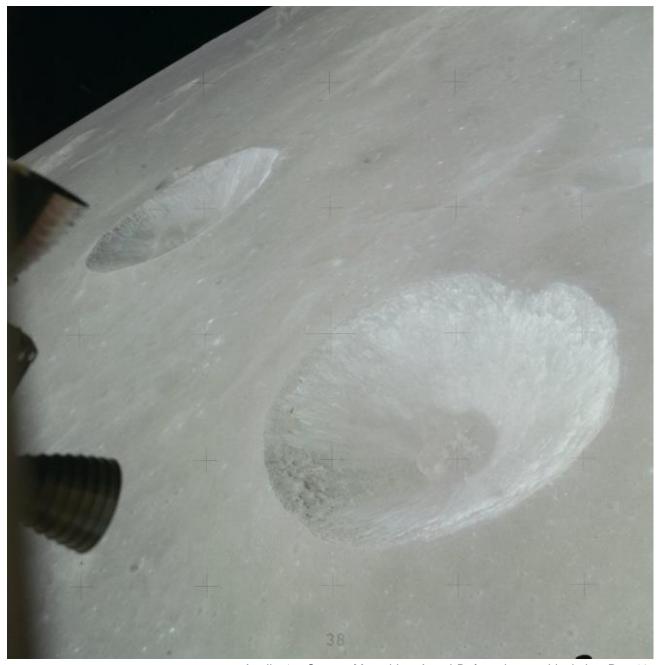
June tends to be a low activity month for a lot of amateur astronomers, unless they're observing the Sun or taking part in public outreach. Given that we're still on our way out of a solar minimum and the Pandemic continues to put a moratorium on public outreach, for the most part there's even less going on. Some centre members watched the annular eclipse online on June 10th, to fill the lull in activity. Lucky Budd spent some time, taking daytime images of Jupiter (seen below). His image captures more detail of the fifth planet than most people manage aided by the contrast of night. A similar image Lucky took earlier in the month caused some notice online and was published by several media sources.



The current restrictions up on Observatory Hill, with four observers allowed at the VCO and another two set up at the Plaskett telescope parking lot, are the norm for the foreseeable future. Pandemic health restrictions are subject to change though, so if you're on the VCO observer's email list, watch for continuing updates.

A reminder that although the VCO belongs to and is for the use of the members of the RASC Victoria Centre, with both weekly scheduled and unscheduled sessions run by our MiCs (Members in Charge). The VCO is located on National Research Council property. This means that all visitors to our observatory must be on our observer list and registered with the NRC. To get on the list, please contact Chris Purse (Membership Coordinator) at *membership@rasc.victoria.ca* and we'll see you up there on the Hill some night soon.

Bruce Lane



Apollo 15: Craters Macrobius A and B, from lunar orbit during Rev 13

A Memorable Safari





In the last several years, Dorothy and I have been on 6 birding trips in Ecuador, Peru, and Tobago with Field Guides. Earlier this century, we birded extensively in Namibia and Botswana's Okavango Delta during 8 stints as resident astronomers, at the Sossussvlei Desert Lodge in the Namib-Rand

Nature Reserve. But our first African safari together was in 1964. At that time, I had been in East Africa for 2 years on a USAID teaching program. Teachers were sent to the 3 East African countries (Uganda, Kenya, and Tanganyika), when they were expanding their secondary education system, but didn't have enough teachers to do so (thanks President

Kennedy). Dorothy was in Marseille, completing a Fullbright Fellowship at the CNRS Institute, and came for a short visit to Mzumbe S.S near Morogoro, Tanzania where I was teaching. At that time Dorothy was more of a "birder" than I was and while we were especially interested in birds, as biologists we were interested in all *creatures*. For her short visit, we had the choice of climbing Kilimanjaro (which I had already done twice) or a safari to Murchison Falls National Park in Uganda - we didn't have time for both. Dorothy would like to have done the climb, but opted for the safari instead (*figs. above of birds at Okavango Delta 2009 & Pale-chanting Goshawk at NamibRand Nature Reserve*).

Heading north through Tanzania, we stayed at a school near Moshi the first night, with Kilimanjaro towering over us. The next morning, we were at the Ngurdoto Crater National Park. Since there was no access into the crater, we viewed from the rim, where Dorothy saw her first paradise flycatcher, as well as many animals down in the lush crater bottom. Then, we were on our way to Lake Manyara NP, where we watched many birds and "tree climbing lions". The next night, we camped on the rim of the Olduvaii Gorge, after collecting fossils from the Leakey's "junk pile", at the site where they had discovered zinjanthropus man. In the morning, we drove down a narrow one-way, 4-wheel drive "track" into Ngorogoro Crater – a group of eland (the largest antelope) was special on that day. We stayed that night in the Serengeti campground, about 5 miles from the park headquarters and the lodge. We were by ourselves except for the lions in a nearby ravine and a hyena sniffing around the tent. On our one day in the Serengeti, we saw 37 lions, 2 leopards, and 1 cheetah – and many birds.

Crossing into Uganda, we continued to Kampala, where we stocked up on samosas and headed north to Murchison Falls. On our first night there we were camped on a ridge away from the lodge and were visited by an elephant munching grass at the foot of the tent. Apparently, it wasn't interested in us, and eventually went away after we had crawled out of the tent to shelter behind the Land Rover.

The next morning, we made our way down to the shore of Lake Albert, near where the Nile River flows into it. For the trip, I had obtained a copy of the first East African bird guide that had just been recently published. While we were identifying birds with the field guide in hand, a vehicle appeared and stopped about 100m from us. Several people got out and an elderly gentleman came walking over, saw what we were doing, and said "I see you are using my book". It was John Williams. He was the curator of ornithology at the Nairobi Museum and author of the guide. By today's standards, the guide was very simple (most of the illustrations were black and white), but it served us well. We were seeing herons, storks. jacanas, kingfishers, and many others. In the afternoon, on a cruise from the lodge to the base of Murchison Falls there were many more birds, as well as hippos and "crocs" and elephants.

Leaving Uganda, we went back through the Kenya highlands, stopping for a night at Lake Nakuru. It was not a national park back then, not even a reserve. We pitched the tent back in the tree line, spending the afternoon and evening watching birds. There were saddle-billed storks, open-bill storks, and pelicans. There were also shorebirds, but the flamingos were the "main feature" – tens of thousands of them. It was a spectacular scene as they took flight, viewing them as we did against the darkening hills across the lake. All good safaris must end. We drove back to Mzumbe via Nairobi, spending one day in Amboseli NP.

Before Dorothy left, the school happened to have its annual *ngoma* ("drum" in Swahili) competition, in which the boys from various regions performed drumming in their local styles, on drums they made or brought to the school. One of the American teachers was a banjo picker and was able to call square dances, so we joined in with a performance of an American square dance. That really "broke the boys up".

I had several more school terms before I was due to leave and usually spent an hour before breakfast walking around the school compound "birding", typically seeing 30 different species. One of the most memorable sightings was of a male, puffback shrike in breeding plumage (seen right). I thought the bird had gotten all tangled up in white cotton – my first view was startling.

I had one more visit to Lake Nakaru and Northern Kenya before leaving. Those were the times to be in East Africa. We saw no one else at Ngurdoto Crater, Lake Manyara, Olduvai Gorge, Ngorongoro Crater, or Lake Nakuru, and few other tourists at the other places we visited. My first trip to Africa in 1962 was for 3 years and I've been back with Dorothy 10 more times, for a cumulative total of over 5 years of my life spent there. I'm not sure if "real birders" would consider me a birder, but I've always like bird watching.



Miles Paul

In Closing



creating pockets of unvaccinated people on both sides of the border.

Things are starting to open up, but it's really not the time to start traveling all over the place on vacation. The government is relaxing their lockdown rules because they now have more room for you in the intensive care units of hospitals, not because the Pandemic is over. More variants are continuing to pop up and being brought home by travelers, with each of these variants wing to be the dominant form that attacks our communities. At the rate things are going we're all going to be memorizing the Greek alphabet before this is over. There is now a higher percentage of Canadians immunized than Americans, with the politicizing of vaccination, religious fundamentalism, and consumption of insane conspiracy theories

On the subject of traveling, Virgin Galactic had its first successful passenger mission to the edge of space, carrying a cargo of a billionaire and some friends. None other than Chris Hadfield was there awaiting their return and acting as master of ceremonies, before personally pinning on their astronaut wings. Days later, another billionaire was launched

into space by Blue Horizon. This time though, the spotlight was stolen by a passenger from the group of would-be women astronauts, sometimes called the *Mercury 13*. These women were sidelined by both the Mercury and Apollo programs, with the first US woman finally going into space aboard the space shuttle in 1983. Wally Funk waited a long time for her chance to go into space, long enough to also become the oldest human to do so, at the age of eighty-two.

In reaction to the beginning of commercial passenger service to space and on the same day Blue Horizon launched, killjoys at the FAA (Federal Aviation Administration) changed the rules to disqualify commercial passengers from becoming astronauts (Ed. somebody didn't get their package delivered). That means that unless you're a pilot, a mission specialist, doing actual science, or in some way responsible for making aerospace flight safer, no astronaut wings for you. It should be noted that none of the passengers aboard the two commercial passenger missions submitted their paperwork to the FAA to be recognized as astronauts, and it wasn't done on behalf of them by either Virgin Galactic or Blue Horizon. Getting astronaut wings also requires that someone else nominates you for the honour. The associate administrator of the FAA has the option of awarding honourary awards, but I wouldn't hold their breath, given the timing of the announcement. If the FAA has any class, they'll at least award honourary astronaut wings to Wally Funk, but even that remains to be seen at this point.

During the sweltering heat at the end of June, we had the virtual RASC General Assembly and while I registered, unfortunately work and the difference in time zones kept me from taking part in most of it. When I have more time, I'm planning on circling back to watch videos of as many things as possible that I missed, although I understand a few of the guest speakers won't have their material up on the web due to copyright issues. At least I got my swag bag in the mail!

I hope that you've enjoyed the feathered features of this month's *SkyNews* and we'll probably get back to focusing more on astronomy again for the next issue, although it could just as easily be a deep dive on the subject of sunglasses. A lot will depend on the activities of the RASC Victoria membership, what extra articles are submitted, and of course the weather.

Bruce Lane: SkyNews Editor

Photography Credits

Cover: Hummingbird Flight to Fuchsias, by Lucky Budd, June 1, 2021

Page 2: California Quail on Over Watch, by Bruce Lane, June 4th, 2021

Page 3: Common Pochard Duck, by Joe Carr, Nov 2020.

Page 5: Crop of Bruce Lane (SkyNews Editor) at 2013 RASCal Star Party in Metchosin, by Chris Gainor

Page 6: Randy Enkin (RASC Victoria President) with Sextant, Feb 20, 2021, by Eva Bild.

Page 7: Apollo 15 training. Left Hand Picture: Back-up Crew members Dick Gordon (left,) and Jack Schmitt prepare to take an SESC (Special Environmental Sample Container) sample during training at the Cape. Dick is opening the SESC. Note that teflon seal protector (the white 'tag' sticking up next to the fingers of Dick's right hand) is still in place. Right Hand Picture: Jack Schmitt carries the scoop with some very non-lunar foliage in the background. Photos filed July 20, 1971. Scans by Kipp Teague. Courtesy of NASA.

Page 8: Photograph and Design of Astro Cafe Mug, by Joe Carr

- Page 8: Apollo 15 training: EVA CapCom Joe Allen (left) joins Dave Scott and Jim Irwin (with a landing site map) as they use the Landing and Ascent Facility to get a feel for one of their Rover traverses. The fidelity of the large landing site model shown on the TV screens in front of them included only the largest features. This photo dated July 23 1971, but undoubtedly shows a session that happened on the 24th. Scan by Ed Hengeveld.Courtesy of NASA.
- Page 9: Apollo 15, Dave Scott leads Jim Irwin and Al Worden down the corridor after suit-up. July 26, 1971. Scan by Ed Hengeveld. Courtesy of NASA.
- Page 10: Posed Book, "How to Build Your Own Spaceship", taken in Editor's home on Feb 21, 2021, by Bruce Lane
- Page 11: Apollo 15 clearing the tower. Research by J.L. Pickering. Courtesy of NASA.
- Page 12: Apollo 15 Launch, photographers and tracking camera operators watching the Apollo 15 Saturn V climb. Research by J.L. Pickering. Courtesy of NASA.
- Page 13: Defying Gravity, by Michael Webb, Summer 2021 at Swan Lake
- Page 14: Osprey Hunting, by Michael Webb, Summer 2021 at Swan Lake
- Page 14: Owls Mating under Moonlight, by Michael Webb
- Page 15: Jupiter in Daylight, with Io, Europa and Genymede, by Lucky Budd, June 20th, 2021. Shot with an asi 224 attached to a Celestron 8" Edge HD
- Page 16: Apollo 15: Craters Macrobius A and B, from lunar orbit during Rev 13, one orbit prior to PDI. Research by Danny Caes. Courtesy of NASA.
- Page 17: Chickens in Rose Garden, by Bruce Lane, July 1 2021
- Page 20: Apollo 15: This picture is the last one that Dave Scott took at the end of EVA-1. He has moved around to a position in the LM shadow, southwest of the Rover. It shows Jim and the Rover, with Mt. Hadley, in all its glory, in the background. On the back of the Rover we can see two SCBs mounted on the gate; and, also, the rake, both pairs of tongs, the extension handle, probably with the scoop attached, and the penetrometer. Note that the TV camera is pointed down, in the stowed position. As can be seen in a labeled detail () from Lunar Topographic Orthophotomap LTO41B4 Mt. Hadley's summit is 4100 m above the LM and at a distance of 20 km. The distant, bright summit immediately to the right of Mt. Hadley is about the same height, but is 33 km from the LM. Courtesy of NASA.

Call for Article and Photo Submissions for the August Issue

SkyNews is looking for submissions of astronomy photos and articles for the August issue of our Victoria Centre's magazine. Send your submissions to editor@victoria.rasc.ca

RASC Victoria Centre Council 2021

Director Positions	Name	Email
PastPresident	Reg Dunkley	pastpres@victoria.rasc.ca
President	Randy Enkin	president@victoria.rasc.ca
1 st Vice President (Acting)	Sherry Buttnor	vp@victoria.rasc.ca
2 nd Vice President	Marjie Welchframe	vp2@victoria.rasc.ca
Treasurer	Deborah Crawford	treasurer@victoria.rasc.ca
Secretary	Barbara Lane	secretary@victoria.rasc.ca
Officer Positions		
Librarian/UVic Liaison	Alex Schmid	librarian@victoria.rasc.ca
Technical Comm Chair/Sys Admin	Matt Watson	admin@victoria.rasc.ca
Skynews Editor	Bruce Lane	editor@victoria.rasc.ca
Public Outreach	Malcolm Scrimger	outreach@victoria.rasc.ca
Schools Program	Sid Sidhu	schools@victoria.rasc.ca
Telescopes	Sid Sidhu	telescopes@victoria.rasc.ca
National Representative/Pearson College Liaison	Bill Weir	nationalrep@victoria.rasc.ca
National Representative	Sherry Buttnor	Nationalrep2@victoria.rasc.ca
Light Pollution Abatement	Dave Robinson	lighting@victoria.rasc.ca
Membership Coordinator	Chris Purse	membership@victoria.rasc.ca
Observing Chairperson	Jim Stillburn	obschair@victoria.rasc.ca
Website Content	Joe Carr	web@victoria.rasc.ca
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