BPAA Newsletter

Battle Point Astronomical Association, Bainbridge Island, WA

ISSUE 70 | JULY-AUGUST-SEPTEMBER CALENDAR | JULY-AUGUST 2005

(Unless otherwise noted, all events are at the Edwin Ritchie Observatory, Battle Point Park)

July

July 2: Star Party Battle Point Park.
Beginner session 8 p.m.
July 3: John Rudolf Memorial Planetarium Fund
Kiwanis Brunch, Wing Point.
July 4: Grand Old Fourth in Winslow.
BPAA Booth D18
July 5: Earth reaches aphelion, 1.016742 AU
July 6: New Moon
July 6 – 10: Mt. Bachelor Star Party www.mbsp.org
July 13: BPAA Board Meeting 7 p.m.
July 14: Bainbridge Island Park & Recreation District
Board Meeting, 7:00 p.m., Strawberry Hill
Park Mini-Gym; First-quarter Moon
July 21: Full Moon
July 28: Last-quarter Moon
July 29: South Delta-Aquarids Meteor Shower Peak.
July 30: BPAA Open House, featuring lectures,
demonstrations, potluck and star party.

August

August 3: BPAA Board Meeting 7 p.m.
August 4: New Moon
August 4–6: Table Mountain Star Party
www.tmspa.com
August 7: John Rudolf Memorial Planetarium Fund
Kiwanis Brunch, Wing Point.
August 8: Neptune at opposition.
August 12: Perseids Meteor Shower Peak.
First-quarter Moon
August 13: Star Party Battle Point Park.
Beginner session 8 p.m.
August 19: Full Moon
August 26: Last-quarter Moon

September

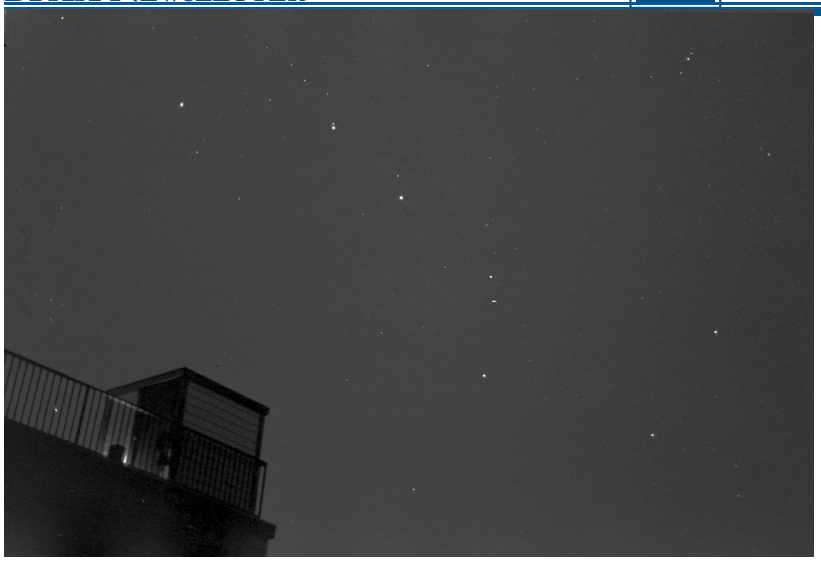
September 1 – 4: Oregon Star Party
www.oregonstarparty.org
September 3: New Moon
September 4: John Rudolf Memorial Planetarium Fund
Kiwanis Brunch, Wing Point
September 7: BPAA Board Meeting 7 p.m.
September 10: Star Party Battle Point Park.
Beginner session 7 p.m.
September 11: First-quarter Moon
September 14: Member Meeting 7 p.m.
September 17: Full Moon
September 22: Autumnal Equinox
September 25: Last-quarter Moon

CALENDAR NOTES

Summer is here, and while we should be concentrating on the beauty of the summer sky, we are distracted by the proposal to install sports field lighting at Battle Point Park. The consequences of these lights could be grave, indeed, but we have done our best to inform the Bainbridge Island Park and Recreation District Board of Commissioners. The public hearing on May 26 demonstrated the depth of support BPAA enjoys on the Island. It was amazing to hear testimony from so many individuals who had been touched by our organization.

There were speakers who assisted our founders in the construction of the observatory, those who were awed by looking through the Ritchie telescope for the first time, those who were appreciative of club members

M27, The Dumbbell Nebula, taken from Battle Point Park.
Photo by Dave Warman



Ursa Major over the Ritchie Observatory, photo by Charlie Johnson

willing to share their scopes at our star parties, and those who were informed and entertained by our speaker programs, our observatory tours, and other outreach activities.

Sincere thanks to all of you who spoke at the hearing, submitted comments to the Park Board, and wrote letters to the editor. Additional thanks go to those of you who volunteer throughout the year in BPAA activities. The support we received from the community is a result of your efforts. We can only hope the Board heard us. If not, we need to stay the course for the next round, which will be before the City. If we can sustain this level of community support, I am optimistic.

The soccer proposal for Battle Point Park is on the Park Board's agenda for July 14. Please plan to attend. In the meantime, we need to continue to serve the community. On July 4th, we will have a booth and participate in the annual parade in Winslow. On July 30th, we will hold an open house. Scheduling for the open house is in progress; details will be available on our Web site, through BPAA groups, in the local newspapers, and on the bulletin board at the Ritchie Observatory. Volunteers are needed both on the 4th and on the 30th. Jim Vaughan, our new Publicity Director, is the coordinator. Please let him know by E-mail (jvaughan@drizzle.com) or by phone (206 780-3902) what you are willing to do and when.

Also, please note the changes to our regular schedule. In July, the BPAA Board meeting will be held on the 2nd Wednesday rather than the 1st Wednesday of the month, since many board members will be at the Mt. Bachelor Star Party on July 6. The member meeting for July will thus be preempted, but if members are interested in showing up and presenting information to the board and other attendees, please do so. In August, there is no member meeting. This has become a tradition, as, like Parisians, astronomers tend to be out of town in August. Finally, in August and September, our star parties coincide with the first-quarter moon rather than the third-quarter moon. This is to avoid scheduling conflicts with other regional star parties.

The newsletter switches to quarterly publication this fall. Issues will appear in fall (September, October, November), winter (December, January, February), spring (March, April, May) and summer (June, July, August). The deadline for each issue will be the tenth of the month preceding the issue; the deadline for the fall issue is August ten.

Summer Sky Highlights. July is the month of the Delta-Aquarid meteor shower. Early in the month, Mercury and Venus are close to each other in the west-northwest. On July eighth these two planets will be clustered with the crescent moon. In August, the Perseids, generally a better show than the Aquarids, will peak, on the 12th. Venus and Jupiter will become increasingly close to each other, approaching within less than two degrees by August 31.

Take advantage of our local star parties or the several dark-sky star parties around the region to view the summer sky, or organize one of your own. Last-minute star parties can be scheduled via our E-mail yahoogroup. Any member who plans to observe can invite others to join in by sending an E-mail to bpaa@yahoogroups.com. To join our E-mail group, send an E-mail with your name to bpaa-owner@yahoogroups.com and we can enroll you. If you want to also have web access to the messages and files, you can join the yahoogroups by clicking the register link for new users on http://groups.yahoo.com/, and then you can request to join our group on this page: http://groups.yahoo.com/group/bpaa/. The system will send us a message, and we'll approve your request after we verify your membership.

—Diane Colvin (dtcolvin@comcast.net)

President's Message

Paul Below

I read a thoughtful article in the May/June 2005 issue of Mercury, the magazine of the Astronomical Society of the Pacific, www.astrosociety.org). The author is Dennis Schatz, an educator at the Pacific Science Center in Seattle, and now the President of the ASP. Dennis is a longtime proponent of hands-on science education, and provided some of the inspiration for Project Astro (a format that forms long term partnerships between teachers and astronomers.) In hands-on science, the students are allowed to actually be scientists. They learn that science is not just some dry facts that one has to memorize, rather it is the best process we humans have for figuring things out. And that learning can be fun.

Dennis' topic was "Monday Night Science," essentially asking what if science was as popular in our culture as sports. He started out the article having some fun with this concept, but then got serious to discuss what we can do to make science more pervasive in our society.

He noted that we have to expand our programs beyond what happens in schools. People spend only a small amount of their awake time in school, and to have an impact we need to gain access to people's free-choice learning time. This is where we can connect astronomy and space with leisure activities (including things as diverse as TV, mall walking, community activities such as scouts). Among the sciences, astronomy arguably interests the public the most. Astronomy serves well as an introduction and gateway to the other sciences and to a lifetime of learning.

At BPAA, we have a history of doing some things that connect to free-choice learning time, for example we have placed astronomy lectures and demonstrations on BI Broadcasting, we have had tables and demos at the 4th of July in Winslow, we have hosted scout groups at our observatory and we hold public star parties. However, there is much more we could do.

I would like to challenge the members of BPAA to help create and present new and exciting activities. If you have not done so already, join our E-mail group. Attend our meetings. Volunteer your expertise, and also take this opportunity to learn something new and then pass the knowledge on to others.

Maybe someday we will have to hurry home in time for Monday Night Science.

How's the Big Scope?

Malcolm Saunders

The new control system is up and running and we have had a couple of tutorial sessions on operating the scope. We have had one or two clear nights for observing recently and the telescope performed well. That is not to say that things went perfectly. There is a lot to learn in operating a telescope of that size. Also, as one member noted "it's like a boat, it will always need work". But when the telescope did not "Go To" the object we meant it to go to, it was operator error in most cases, and probably in the rest of the cases as well. I would love to see more people trained to use the telescope. With that in mind I intend to offer more tutorial sessions. If you are interested in learning to operate the telescope, send me an E-mail message and I'll make a point of letting you know the next time one of these is planned.

As always, there is work that needs doing on the telescope and in the dome, and helping with that work is one way to learn a lot about the telescope. We have two computers in the dome. One of them operates

Telescope Lessons. Photo by Rik Shafer

the telescope control system. The other is currently used as a star chart. It is surprising how much light is given off by those two computer monitors. You don't notice it in the daytime, but at night, when your eyes have become accustomed to the dark, with the red light in the dome dimmed way down, the monitors are the brightest things there and they seriously interfere with

observing. One of the two monitors can be turned down to the point that it is no problem. The other can not be turned down that low. We need to replace that second monitor. We should also consider replacing the computer that operates the star chart software (*Starry Night*) with a faster machine. The current computer runs at 350 MHz. That is slow enough that the software does not quite run correctly. Also, the computer's ethernet card was damaged during a recent thunder storm.

If anyone would be willing to prepare a short "How To" guide to running the telescope, please contact me. I haven't had time to prepare it myself.

There is lots of work to do that amounts to tidying up and re-routing wiring, and instrumentation on the telescope and in the dome. For example the control computer now sits on top of the desk in the dome. It should be in one of the cabinets under the desk.

The same thunderstorm that damaged one of the computers in the dome also knocked out a network switch in the dome, the DSL modem (on the second floor of the observatory) and the answering machine in the office on the ground floor. These have all been replaced now and the network is back in service.

Swallows

Paul Below

May 8, 2005: Last night at the star party I saw that our swallows have returned and once again rebuilt their nest over the door. Must be summer again.

I believe that this will be the 3rd year that a pair will have raised a family on that spot. I do not know how long swallows live, but since the nest is in exactly the same spot as before I suspect the pair must have at least one of the original adults or maybe one of the birds that was born there.

As the sun was setting the sky above the dome was filled with swallows, more than 20 of them flying around and around. Then, suddenly, as it got darker there were only 2 left, and they flew to the nest and the light over our door.

As to the star party, it was pretty cloudy, but we did get a pretty good look at Jupiter.

Housekeeping:

Harry and Diane Clean Up

Harry and Diane Colvin tending to the Observatory this spring. *photos by Rik Shafer*

Calling Science Fiction Writers

The Science Fiction Writing Cooperative of Bainbridge Island will soon publish its second anthology. They are seeking stories up to 6,000 words long, as well as poems, by writers who are residents of Bainbridge Island, who work here, or who belong to an organization based primarily on Bainbridge Island. Stories need not be "hard" science fiction, but should include speculative elements similar to those found in the genres fantasy, magical realism, surrealism, horror, alternative history, modern myth, and so on. Works may cross genres or challenge narrative boundaries. Closing date for submissions is July 22, 2005. Send submissions and inquiries to SFWC, 9482 Green Spot Place N.E., Bainbridge Island, WA, 98110-1951. Find more information at http://www.eagleharborbooks.com

A Twinkle in Their Eyes

Anna G. Edmonds

Was it a twinkle in their eyes eleven years ago? Of a hoped-for offspring, a star, a dream, or all of these? Knowing the sparks of imagination that were touched off whenever John Rudolph, Ed Ritchie, and Mac Gardiner met together, probably the twinkle was a mixture of all, compounded with a liberal gleaming of excitement. Out of a breakfast meeting in November 1993 of these three founders, the Battle Point Astronomical Association came into being.

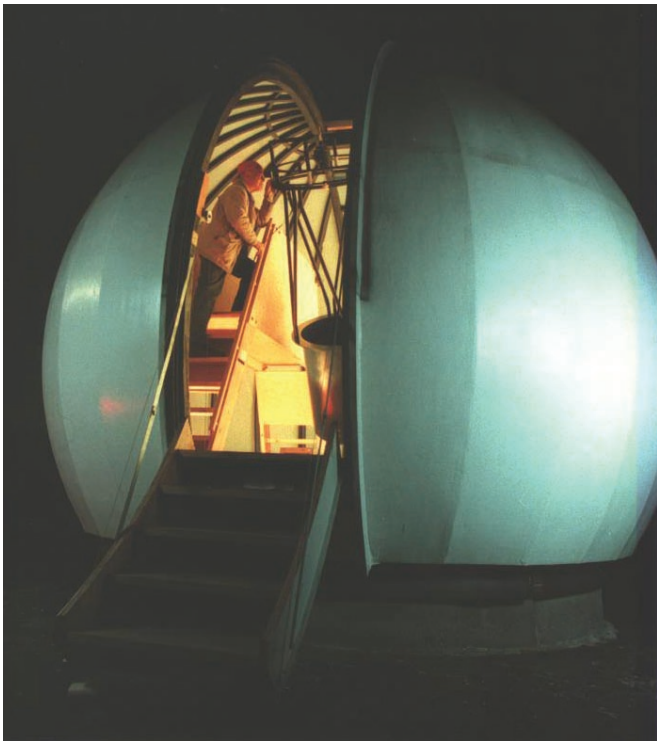
Battle Point Park was an appropriate place for BPAA activities for several reasons. The lighting within the park could be controlled. By its very nature, amateur astronomy, needing quiet and darkness, was unobtrusive.

The Helix House (now the Edwin E. Ritchie Observatory) was a solid building; it provided a good base for a large telescope mounting, and could be made secure from casual vandalism. In addition to those features, the roof of the Observatory provided a 360° view of the sky.

Besides the litter from years of disuse, two large cement blocks in the center of the building had to be removed with the help of 56 sticks of dynamite and hours of jack hammer labor. In their place a column reaching from rock bottom to the roof but totally free of the building was constructed to support the telescope. Then the dome was made, rib by rib, secured to a revolving ring, and covered with waterproofing.

The building, thanks to John Rudolph's architectural skills, now accommodates meeting rooms, a workshop, and a basic astronomical instrument. This instrument comprises three holes in the walls that focus so that the image of the Sun appears on the north wall of the meeting room during the winter solstice. Its only required maintenance is clearing out cobwebs in the holes; thus it's in keeping with John's devotion to archaeoastronomy as he studied it in places like Susanville, CA.

John was meticulous in reporting the names and contributions of those who helped with the construction of the Observatory and its dome. They, plus the many groups who have used the Observatory and the many speakers who have given their time over the years, have been reported in the bi-monthly BPAA Newsletter. Likewise, the early donors' names are on plaques in the entrance to the building.



John Rudolph in the Dome. Photo courtesy The Seattle Times.

Ed Ritchie was the telescope builder; he wrote in the November 1994 Newsletter: "After seventy-one years of being free to discover and learn about the universe I live in, I can say with certainty one thing. I don't really know a lot about it. I find it beautiful and awesome, but I think I understand little of how it operates.

'In WWII I was a navigator and the stars and the Sun became operating tools for me. Shortly after, I began to study electronics and telescopes. The fascination of these two subjects has never left me. I have built many electronic devices and many telescopes and now have in my back yard a 17 ½ inch Newtonian reflector telescope and observatory electronically controlled. Hundreds of moms and dads and kids have looked through its eyepiece. So it's not surprising I'm one of three people instrumental in getting the Battle Point Astronomical Association going."

Five months later, on April 17, 1995, the Boeing Defense and Space Group announced that they had donated two high-quality mirrors to BPAA. These were the glass used by Boeing in the Hubble Mirror. With them in hand, Ed began building the mount, and inventing and crafting the electronic grinding machine

in order to shape the 27 ½ inch mirror to a parabolic surface that would gather and focus starlight through a lens. On December 11, 1997 the telescope was lifted to the roof and settled into place on its support column inside the dome. Regrettably, Ed Ritchie had died before his 'scope was operational.

The third member of the group of founders, Mac Gardiner, had throughout this time kept BPAA focused on the dream of providing an educational facility specializing in astronomy that would encourage people to develop their curiosity. "With the first-class equipment that we have available," he wrote, "we can explore, and 99% of what we hope to be able to see has never been seen before. We also can redo certain wonderful experiments of the past that changed the thinking of the educated world of that time.

Mac's dream was that the tools of this facility and the encouragement of its mentors would enable students of all ages to discover, hypothesize, interpret, analyze, generate, review critically, and publish work that could be the stuff of science awards, or the discovery of comets, super novae, and even unforeseen worlds.

In addition to keeping the fledgling Association on an even keel and to challenging others to volunteer their talents, Mac concentrated on establishing a sound financial basis for BPAA. He wanted BPAA to start slowly and to keep within the bounds of what Bainbridge Island would support. Within the first year he secured the tax-free status from the State, and then enrolled BPAA in the yearly Bainbridge Foundation financial drive. The contributions collected by the Foundation, he believed, would enable BPAA to cover its operating expenses so that whatever physical development was needed could be taken care of with specific funding campaigns.

The excitement of that morning breakfast meeting in 1993 resulted in a gift to Bainbridge. It was free in that most of the money and the labor were given without conditions. It is free in that the Observatory is for the use of the public on demand (and on the cooperation of the weather). The continued twinkle of this star—or dream—depends on keeping the night sky around the Observatory dark.

Essentials for Remote Dark Sky Observing

Harry Colvin

Summer is here and many of us will be packing up and traveling to dark sky sites. So I thought I might share some of the things I have learned about observing under field conditions at star parties. Most of what I will have to discuss is just common sense, but it is often the simplest things that lead to serious problems when one goes to a remote site

The major difference in astronomy at home and in remote sites is that at home sites one is usually not concerned with creature comforts. A warm bed is not far away, and if you forget something, so what, you can just run home and get it. For those of us who are spoiled with a home observatory, life is even better: Internet access, power, good music, electric blankets to keep warm, and so on.

Dark sky sites vary greatly in their distance from the nearest town and in the creature comforts available. The Texas Star Party for example has an air conditioned dining hall and meeting rooms, a swimming pool, on site flush toilets, shower houses, RV hookups and even motels and cabins within 5

Oregon Star Party, 2004 photo by Jan I. Keiski

minutes of the viewing field. The only downside to this event is that it is 1,200 miles from Bainbridge Island. On the other extreme is the Oregon Star Party. OSP is a great star party, but definitely in the middle of nowhere. It's dusty, hot, windy, rocky, and cold, but it does have great horizons and the skies are some of the darkest in the country. It has shower trucks but everything else, including the porta potties and meeting tents, are definitely in the beyond rustic category. A new addition to OSP, that I look forward to again this year, is Internet access.

One thing all star parties have in common is that if you forget something you may be in deep trouble. And the more complicated your equipment and methods the greater chance you have of something going wrong. If you observe with a Dob and use paper charts, not too much can go wrong. However, if you are using a Goto scope, electronic charts, computers, and imaging cameras watch out for Murphy's Law.

What to Bring?

The answer is simple. Bring everything you can fit into your car or trailer. I know some will disagree with me on this, but this is not a backpack where weight is an issue, so just bring everything. Yes every site is different, but for the remote sites like OSP just bring everything.

How Not to Forget

The only way not to forget something is to begin making a check list early, at least a week before the planned departure. Keep a small note pad handy and as you think of things write them down. I keep my check list as a doc on my computer and refine it before each trip. Check lists made at the last minute or the night before do not work. Once the list is made, USE IT, before backing out of your driveway, not when you are 50 miles down the road. If you are going to a very remote site the list will be long because you must include both your creature comfort equipment and astronomy gear. Another suggestion is to set up all your telescope gear the day before then load it directly into your vehicle.

Things I Have Left At Home

In spite of check lists I have still left things behind. The most egregious was leaving behind the truss poles for my Dob. We were only two hours from home so a recovery was possible, but if we had been at OSP without truss poles the week would have been ruined. Here are some items that one could easily forget.

Insect repellent, prescription medications, sunscreen, sunglasses, two spare batteries for every piece of equipment, rain gear, bottled drinking water, tools, fire suppression equipment (required for OSP), reference books and charts, coffee, ice, binoculars, a compass, money, cell phone, computer software, spare computer if you have one, phone numbers for software and equipment dealers, ear plugs, black out eye patches for sleeping during the day, shower gear, laser pointer if permitted, warm clothing, more warm clothing, moon boots, and more warm clothing.

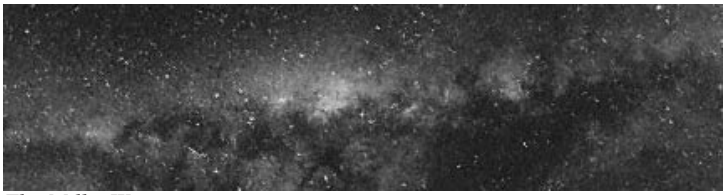
Prepare Your Car and Trailer

There is nothing more irritating and inconsiderate than someone who by accident turns on headlights, dome lights etc. at a star party. Newer cars are real difficult to operate without some darn light coming on. So if possible remove all door and dome lights from your vehicle. Try to figure out how to drive your car without the parking lights coming on or figure out a way to cover them should it be necessary to move your vehicle at night. Another thing that happens is the remote keys used to lock and unlock doors will flash headlights, so remove the remote from your key chain and use a key only. I flashed my lights at OSP because the remote was in my pocket and went off when I bent over to get something. If you have a trailer install red lights, curtains usually are not sufficient. This is serious business. Light violations at the Texas Star Party were enforced by uniformed armed sheriff's deputies who issued $75 fines for the first offense and expulsion from the site for the second offense. They do things different in Texas, but I did not see many white lights and, yes, I heard that two astronomers were escorted off site about 2:00 a.m. one morning.

What to Do First

When one arrives at the dark sky site the first problem is setting up and trying to figure out where north is if you will be operating any kind of tracking equipment. A compass is essential as well as knowing the declination. I always allow at least two hours for set-up. Setting up in the dark is really difficult so avoid having to do this if possible. Get your equipment organized so you can find it in the dark with out too much light. Over-dress for cold. If you use a computer make sure that the screen is shielded with dark red material to prevent white light from flooding the area. I also use a black hood to completely cover the computer when I am not using it. Light pollution from computers can be a real problem so if you use a computer, be responsible.

Too Many Stars and It's Dark



The Milky Way

Once it gets dark many experienced and first time observers find it difficult to find their way around the sky. The problem

is that there are just too many stars and the familiar guide stars are buried in a sea of dimmer stars that together make the sky appear almost dusty. The Milky Way will have a marbled appearance and will extend from horizon to horizon. In really dark sites finding your eyepieces and other equipment will not be possible if you are not organized and finding a dropped eyepiece retainer screw becomes a major problem. If you can't find and operate your equipment blindfolded during the day then you are not ready for a really dark sky site. Get everything you will need out of your car before dark. Car interiors and trunks are extremely dark even with a red light and white light is not an option. Using a finder scope with cross hairs becomes difficult because the cross hairs are not visible, it's too dark. Illumined finders are a must-have piece of equipment for visual observers without Goto scopes. Walking in the dark is not easy and I have witnessed people walking into equipment, other people tripping over rocks and falling down, tripping on tripod legs, and I even had a person completely collapse my table, computer and all. At OSP I cleared rocks from paths but there is nothing that can be done about the infamous "dammit" bushes (you trip on them and then say dammit). I mark my tripod legs, trailer tongue, and awning tie down lines with blinking LED lights. I also have white reflector tape on chairs, table legs, and other equipment. If you have visitors during the night expect the worst.

Fatigue

Fatigue is a natural consequence of sleep deprivation but may also be the result of dehydration. Remember many star parties are held in high mountain deserts where additional fluid intake is essential. A good rule of thumb is to double your normal fluid intake. It will not harm you and could make a real difference in your ability to perform during long observing sessions.

Sleep

Sleep deprivation can be a real problem after about four all-nighters. It seems sleeping late in the morning does not help. Although most star party rules ask that quiet hours be maintained until 10 a.m., someone is usually up and about by 8:00 a.m., talking or making noise. These of course are the folk who turn in before midnight. Just be aware getting sleep beyond 8:00 a.m. may be difficult. If you are in a tent it is even more difficult to sleep beyond 9:00 a.m. because of the heat. I have even been awakened by barking dogs, and my reaction was not very diplomatic. The Texas Star Party bans pets, a good idea in my opinion.

Serious Observers Have a Plan

If one is going to get the most out of the time spent at a dark sky site, an observing plan is essential. Know what you are going after before it gets dark. The list of objects should be sequenced so that minimal movement between objects is required and those objects that set early are observed first. Be prepared for wind and dew.

Alcohol and Coffee

I do all-nighters and must have a triple mocha around 2:00 a.m. to make it until the sky begins to brighten up around 4:00 a.m. For serious observers, alcohol is very bad for night vision and coordination and may make just staying awake almost impossible. I do, however, find a glass of wine allows me to go to sleep quickly after an all-night viewing session. But this is a very individual thing

Problems at Star Parties

Most of the larger star parties will attract folks with different objectives. Some come to socialize, others to learn, and some to do serious astronomy. As in any large group there will be problems, such as noise when you are trying to sleep, flashlights that ruin your night vision, kids running around in packs, and people bumping into your scope. But keep in mind star parties are supposed to be fun, after all this is a hobby. So a good attitude is also essential. Have fun this summer.

Sports Field Lighting in Battle Point Park?

Comments compiled and edited by Vicki Saunders

I. Astronomy Happens in the Dark

Because of weather conditions in our area, amateur astronomers have relatively very few nights during the year when sky conditions are sufficiently clear for star watching. When clear nights do occur they usually appear in a succession of three to four nights. This has been a difficult fact of life

for those of us attempting to keep the mission of the Ritchie Observatory alive. If amateur astronomers have to compete with a lighted sports field for clear nights the Ritchie Observatory will not survive.—*Harry Colvin*

We do not object to soccer fields, but we strongly oppose the lights. The lights would totally destroy the effectiveness of the observatory and probably permanently put the Battle Point Astronomical Association (BPAA) out of business ...part of the agreement between the Battle Point Astronomical Association (BPAA) and the Parks Department, was a provision that the park would cooperate with BPAA to ensure that park lighting would not interfere with the use of the observatory. .—*James Vaughan*

In summer, astronomical twilight straggles in around 11 p.m., forcing stargazers to work into the wee hours. "If you get a good night in the fall or winter, it's super good and probably better than some of what you get in the summer."—*James Young*, quoted in the *Seattle P-I*, September 19, 2000

Younger children can only attend at dusk in the winter, before their bed-times. Astronomy happens in the dark, not by clock time but by sun time.—*Dave Warman*

One of the main reasons for the (soccer field lighting) proposal is winter practice and play. Although there are ten soccer fields already on Bainbridge, according to Bainbridge Island Youth Soccer (BIYSC), none of them are suitable for winter play. The existing fields are either too wet or play is not allowed because the game tears up the fields in the wintertime. So if this goes through there will be lots of lights in the winter—forget observing in the winter months, it will be but a memory.—*Diane Colvin*

I have two small telescopes, and the view of the sky from my home is obscured by a tree-covered ridge to the south and the lights of Winslow and Seattle to the east. The availability of dark, relatively expansive skies at Battle Point Park provides me with the opportunity to enjoy the night sky that I don't otherwise have.— *Frank Petrie*

The installation of ball field lighting would make this unique observatory useless.— *George Mccullough*

To even think of rendering the observatory useless by opting to install lights on adjacent fields is, if you'll forgive the necessary dramatization, to extinguish the light from a thousand stars. This is one of those instances when the potential number of participants is not the appropriate measure of worth among competing populations and causes. Perhaps protecting a forest area to preserve an endangered species is not too great of a stretch as a corollary circumstance. Please find an alternate location for lighted playing fields, as that telescope can go away, but it cannot move.—*Glen W. Rovig*

Darkness is becoming as rare as any of our other natural resources. Once the lights are in, there will be pressure to use them—field shortages, short days in winter, adult leagues wishing to travel to the island, groups willing to pay money for the privilege to use the fields...Why would anyone suggest putting sports lighting next to an observatory? The observatory's existence should remove the site from consideration ... Astronomy is irrevocably incompatible with outdoor lighting. The soccer folks have promised not to use the lights during certain times—the early evening hours in summer, for example—and I believe them. That is, I believe they would not use the lights when it is light outside. Nobody is doing astronomy then, either— *Catherine Koehler*

Bright lights nearby will destroy dark adaptation (night vision) which is necessary for astronomical observation, and the light pollution will make it impossible to observe faint objects such as near-earth asteroids or distant galaxies.—*Rik Shafer*

Some of the (Park) Board members had never set foot in the Ritchie Observatory, perhaps have never been in Battle Point Park after dark to witness the unique, star-lit space it provides. It is the isolation from light pollution that makes possible the quality of viewing that the world-class Ritchie telescope provides.—*Steve Neff*

Amy and Katherine Shafer studying a globe of the planet Mars at the BPAA observatory.

II. Inspiring Science Education

(The Observatory facilitates) monthly visits by school and scout groups throughout the year to learn about telescopes and viewing the sky, in addition to monthly public star parties. The BPAA has brought together a talented group of highly knowledgeable people who share their expertise with anyone with an interest. For the past seven years we've offered astronomy courses for teachers and the public. Teachers throughout Kitsap county have enriched their students through the resources — people and facility—of the BPAA. The reach of the BPAA is much greater than its membership—it reaches into the classrooms of all the local schools.Enthusiastic teachers and views through the Ritchie Telescope have excited students from Bremerton to Bainbridge in science. Personally, I've learned a great deal of science and astronomy. I have been able to propose, design, and initiate a secondary astronomy curriculum for the Central Kitsap School District— all because of the BPAA. The Ritchie observatory is the focal point that makes all this happen.—*Michael Walker*

I am sure Ed Ritchie, were he alive, would be an advocate for soccer fields. But, being the genius he was, he would encourage contemplative activities after the sun went down. He would encourage young people and their parents to put down their soccer balls and take up their telescopes; to ponder their place in the universe.—*Steve Neff*

The Whirlpool Galaxy: NASA

If we encourage just one kid to enter science via our programs this will be worth more to society than 500 kids playing soccer even if 50 become professional.—*Harry Colvin*

"We really wanted to get young people enthused about astronomy and related science," Rudolph explained. "We wanted to explain to the kids what's up there. We could never compete with the Hubble, but amateur astronomers can find a home here." So every weekend, weather permitting, children and their parents clamber up the spiral staircase to look at the stars. And though the lights of Seattle sometimes prevent perfect viewing, there is always awe when the stars and the moon illuminate the expanse.—*Seattle Times,* January 15, 1999.

At least 80 % of the visitors who come to the Ritchie Observatory and the grounds to observe the night sky do so during the 3-4 hours just after sunset. This is particularly true with school, scout, and family groups who visit the Observatory during the school year, when it gets dark early. To suggest that these groups arrive before sunset, set up telescopes, and then wait for soccer games and practices to end at 8-9 p.m. is not acceptable.—*Harry Colvin*

Western Washington abounds with amateur astronomers, some with even larger scopes of their own. But public observatories are few and far between… John Rudolph, a co-founder of the Battle Point group, says "…Our whole thrust is education." The Battle Point Astronomical Association sponsors classes year-round, including a kids' robot-building class taught by an electronics wizard who worked on rocket guidance systems. Also popular is a 16-session course on beginning astronomy taught each winter by an Olympic College instructor. Free monthly lectures bring in outside experts, including UW astronomers.— *Seattle P-I*, September 19, 2000.

The facility provides science education to numerous school and scout groups throughout the year… Astronomy is one of a few sciences capable of capturing the imagination of young people and opening the door to a lifetime of learning.—*Paul Below*

This organization fosters much more than observation. For example, members have formally proposed sophisticated studies to be carried out by an orbiting laboratory for which NASA solicited public proposals. Prominent astronomers and other scientists are brought to the Island to lecture on their research. Electronics, computers and robotics training have been offered to island youth, not to mention all that we older folks learned in the process of implementing the founders' dreams. Our meetings provide a forum for kindred spirits, with a variety of scientific perspectives, to hold wide-ranging, informative discussions. Half a dozen courses and

symposia, led by outstanding academicians, have been well attended. I and others became motivated to learn all we can about astrobiology, an emerging multi-disciplinary field for which the University of Washington is a NASA-designated center of excellence. Members work actively with local teachers to enrich the schools' science curricula. BUT NONE OF THAT WOULD OCCUR HERE WITHOUT A FUNCTIONING TELESCOPE THAT REQUIRES DARKNESS.—*Bill O'Neill*

With the concern about poor science education in this country, BPAA provides one alternative. The letter from the soccer folks says, because of their numbers, that "they are Bainbridge Island!" We feel that those of us who believe in science are also Bainbridge Island.—*Glen and Cathy Wyatt*

The BPAA is a beacon to people from all over the country. Besides our enjoyment, we also go to this place because we teach and inspire CHILDREN—that is the main reason I volunteer at the BPAA—If we really want our children to compete in today's world—and not to just hope maybe they'll win the lottery or be the next Ken Griffey, Jr.—we need to inspire them to learn and to study.—*Cathy Koehler*

III. A Public Trust

Battle Point Park has several features making it an appropriate area for BPAA activities. The area is quite secure. All-night use, along with appropriate lighting, can be well controlled. The Helix House is solid, provides a good base for telescope mounting, and can be made very secure at little expense. The House and area have historic backgrounds, making them appropriate repositories for working archaeological astronomical systems. By its very nature, amateur astronomy is unobtrusive (it needs quiet and darkness), so people in the homes surrounding the Park should find it to be an excellent neighbor. BPAA expects that this astronomical facility will provide an excellent educational venture for the whole community. —*John Rudolph, "*Proposal to Build the Observatory"

Ritchie Observatory. photo by Jared Barnhill

Monetary donations, including $15,000 from the Bainbridge Island Rotary Club, moved the project forward. Island contractors not only donated materials and labor, their crews ended up joining the astronomical association. Community volunteers pitched in, forming a bucket brigade to construct a column running from the foundation to above the roof to support and stabilize the 5,000-pound telescope. "It involved tons of concrete...," (Mac) Gardiner said, adding that the concrete block wall is filled with gravel to minimize vibrations. One of the toughest jobs was to rid the lower floor of a massive concrete hump that extended 11 feet across and 3 feet high. The hump originally was a stabilizing base for the powerful helical coil needed to operate the Navy transmitter. "John (Rudolph) got a team of guys with electric jackhammers, and they went out one weekend and made some scratches on it," Gardiner said. Rudolph lined up a Seattle demolition team that was willing to blast the hump ... if the astronomy group first drilled it with 80 holes 3 feet deep. Their $2,000 fee, however, seemed out of reach. Falling back on inventiveness once again, the association raised the funds by selling $10 raffle tickets for the privilege of setting off the first blast. "We were back at the picnic tables about a quarter of a mile away" when the hump was blown up, Young said. "You could see the smoke come out, then you could hear the explosion."—*Seattle P-I*, September 19, 2000.

There are only a handful of similar amateur, non-government funded observatories in the country. It is a resource that should be viewed, shared, and publicized as Bainbridge's crown jewel of community benefits— a true community landmark.— *Glen W. Rovig*

Please show respect for our observatory founders and compassion for our school children. Do not develop the ball field lighting at Battle Point Park!—*George Mccullough*

In This Issue

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Electronic submissions required.
Attach graphics as separate files.
Include 'BPAA Newsletter' in subject line.

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