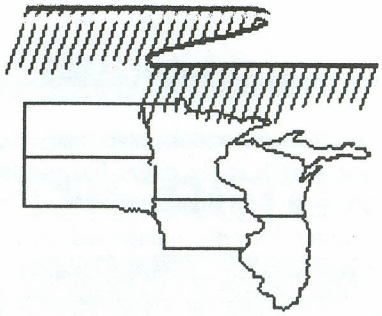


NORTHERN LIGHTS

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Roaming the Region

by Janet Stevens

Star parties, star parties, star parties. The summer season is replete with opportunities for amateur astronomers to congregate on the weekends to observe the heavens. Here is a summary of those in our area during the summer of 1993.

The Wisconsin Observers Weekend was held June 18-20. Hosted by the Northeast Wisconsin Stargazers, it was the first victim of the "1993 Midwest American Monsoon season". Held at Hartman Creek State Park, about 30 overly optimistic observers attended and tried to outlast the storms. By mid-afternoon Saturday, most of the more rational people had packed up and left. However, some diehards from Green Bay (Neville Public Museum Astronomical Society) apparently "kidnaped" the remaining NEWSTAR member, Dave Juckem, forcing him to remain there over Saturday night. They also renamed the event to "The Wet Observer's Weekend".

The next star party in our region was held by the Chippewa Valley Astronomical Society, the newest member of the NCRAL. The Northwoods Starfest was held August 13-15, near Eau Claire, Wisconsin, at the Beaver Creek Reserve, home of the Hobbs Observatory and its 24-inch telescope (and a C11 in another dome). Luckily, the skies for the Starfest were crystal clear Friday night, with a very bright Milky Way. Midnight treats of hot salsa and chips helped to keep observers awake. Saturday afternoon was the time for the swap meet and speakers. The meals were great, but on Saturday the skies turned partly cloudy. All-in-all, it sounds like it was a great weekend! Next year's Northwest Starfest will be held August 12-14. Come see the Persieds in the North Woods!

On the next weekend, the Quad Cities Astronomical Society (QCAS) held the Eastern Iowa Star Party at the Wapsi River Environmental Education Center, near Dixon, Iowa. About 40 people attended, coming from as far away as Minnesota. Friday night skies were a washout early, but cleared after 1:00 a.m. for several hours. Saturday night's forecast was for rain, but, it did not turn out that way. The night was clear, but after midnight the dew came in heavy. So everyone went back to the camping area , made a big bonfire and roasted "weinies". (Of course, NCRAL Chairman Marion Bachtell had to have her traditional S'mores along with QCAS member Lori Brown. This has apparently become a tradition at EISP.) On Sunday morning, those who remained were greeted by rain (not unusual this summer in Iowa) for their drive home.

The NCRAL Convention

Remember this date - April 30, 1994! The 48th Annual Convention of the North Central Region of the Astronomical League will be held in Burlington, Iowa, and is sponsored by the Southeastern Iowa Astronomy Club. For more information, please contact:

Dave and Marion Bachtell
1901 South 10th Street
Burlington, Iowa 52601
Phone: 319-753-1422

Further information will also be included in the next issue of *Northern Lights*.

Last, but certainly not least, was the Chicago Astronomical Society's 14th annual Astrofest, held at the Shaw-waw-naw-see 4-H Camp near Kankakee, Illinois on September 10-12. 625 people registered to attend, but there were 35 no-shows, which was definitely their loss. The skies Friday night were great! By 2:00 p.m. Friday, the telescope field was half full, even though Astrofest did not officially begin until 6:00 p.m.! Saturday's swapfest was the biggest ever, having started Friday afternoon. There were well over 100 telescopes on the field, including a 36" Obsession. Three Canadians brought their own portable observatories. After dinner on Saturday, it started raining. As there was no after-dinner speaker scheduled, Richard Berry held an informal talk on CCD's for those interessted in the Dining Hall. It was possibly the best Astrofest yet! Don't forget to mark your calendars for next year's Astrofest, September 9-11, 1994.

The 1993 NCRAL Business Meeting

by Bert Stevens

The 1993 NCRAL Business meeting was called to order at 9:05 a.m. Friday, July 30, 1993, at the Sheraton Madison. The first order of business was the roll call of societies to determine if a quorum was present. With 20 of the 29 member societies represented, a quorum was declared.

The minutes of the 1992 NCRAL business meeting were summarized and approved. The Treasurer's Report was then presented. The current Regional balance is $1,040.68.

Chairman Bachtell discussed her activities in the past year. These activities were detailed in the last issue of *Northern Lights*. They consisted primarily of visiting several the NCRAL Societies. Ms. Bachtell met with their officers and discussed their needs and how the Region could help them out.

Vice-Chairman Janet Stevens reiterated the importance of the ALCor in providing communications between the League and the local societies. This communication takes place primarily through the *Reflector*, which is mailed bulk rate. This makes it important that the Astronomical League have the correct addresses on the newsletters or they will not be delivered. The post office will not forward incorrectly addressed bulk rate mail, even if a change of address has been filed.

Northern Lights Editor Bert Stevens reported that Northern Lights is in good financial shape. The subscription increases last year and the stabilization of the issue length at six pages has put the publication on firm financial footing. Co-editor Janet Stevens mentioned that it would be a good idea for every society to have at least one member subscribe to *Northern Lights* so the information in each issue is distributed to the local society.

Under old business, there was a discussion of the possibility of holding the Regional meeting at Astrofest. After some discussion, a straw poll indicated that the vast majority of those at the Business Meeting thought the Regional Convention should be kept separate from Astrofest.

Dan Koehler then complimented the Executive Committee on their action that put through the amendment that limits the number of proxies that can be held by one person at Astronomical League Council meetings. Mr. Koehler-felt that this was a very positive step in bringing more diverse opinions into Council Meetings.



The North Central Regional Officers: (from left to right) Secretary-Treasurer Deena Joslin, Vice-Chairman Janet Stevens, and Chairman Marion Bachtell. Standing is Nominating Committee Chairman Frank Roldan, who conducted the election of officers. Photographs for this article are courtesy of Ed Flaspoehler, Jr.

Northern Lights is the newsletter of the North Central Region of the Astronomical League. It is published quarterly in January, April, July, and October. Individual subscriptions are $3.00 per year and group subscriptions for NCRAL members only (minimum 10) are $2.00 per copy per year, all sent to the same address. Send checks made payable to *Northern Lights* to: *Northern Lights*; P.O. Box 8067; Rolling Meadows, IL 60008-8067.

Articles and ideas for articles about any astronomical topic of interest to amateur astronomers are invited and should be mailed to the above address. *Northern Lights* is edited by Berton and Janet Stevens. All material is copyright 1993 by the authors and used with their permission.

THE RETURN of the EMPRESS



Last year The Green Bay Goons (more affectionately known as the Neville Public Museum Astronomical Society) surprised NCRAL Chairman Marion Bachtell by declaring her **Empress** of the NCRAL at the banquet of the national convention in San Jose. This year they provided the Empress with escort and bodyguard service armed with squirt guns and rifles. They also provided her with a plate full of waterballons, one of which she threatened to throw at photographer Flaspoehler.

The Regional Meeting then approved holding the 1995 Regional Convention in Fargo, ND. The Fargo-Moorhead Society will hold the meeting in late June due to the possibility of inclement weather earlier in the year.

It was suggested that the Region start charging dues to cover the cost of paying for *Northern Lights*. Jim Fox pointed out that this is not permitted under League Bylaws. It was pointed out that unlike the Reflector, groups can order Northern Lights in a bulk subscription even if it

does not encompass the entire society. The only requirement is that all copies are sent to the same address.

Dan Koehler mentioned the silent auction that benefits the AL Trust Fund. He underwrote the cost of obtaining the various item for the auction. The hope is that proceeds from this auction will substantially increase the Trust Fund. Interest from the Trust Fund goes to finance League activities.

Nominating Chairman Frank Roldan then conducted the elections. All the current officers were reelected without challenge. As League Historian, Mr. Roldan then invited everyone to come to the display room to see the League's Historical exhibit.

Chairman Bachtell then presented the Region Award. Chairman Bachtell's presentation speech follows:

"Part of my duties as Chairman is to present the Region Award each year to an individual who, in the opinion of the Executive Committee, most exemplifies the spirit of the goals the League and the North Central Region project for amateur astronomy. This is a subjective process and based on our individual perceptions. Our decisions are reached independently of each other.

If I had to rate my duties as Chairman, presenting this award each year would be at the top of the list.

Our recipient this year has been involved with amateur astronomy from an early age. He is an active observer, with connections to the AAVSO, IOTA, ALPO, the Herschel Club, and Messier Club. He regularly attends both the National and Regional Conventions, the Texas Star Party, Winter Star Party, Stellafane, the ASP "Universe Conventions" and Astrofest, as well as participating in numerous eclipse expeditions.

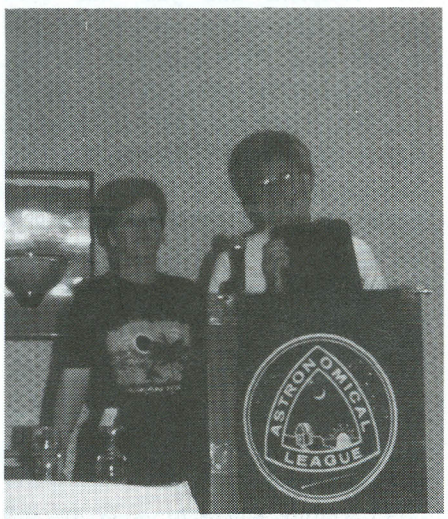
His areas of interest include videotaping, astrophotography, CCD astronomy, image enhancement computer programming, and solar observing and photography.

And if all of this were not enough, he is very actively involved in the activities of his Society. He very tirelessly gives his time to the Society, conducting classes - such as mirror grinding and telescope building - giving lectures on a wide range of subjects. When the Society does public programs and observing sessions, you will always find him there. He is the Society's ALCor, a position he has held since it joined the League. He was the Society's President for many years, and is currently it's Treasurer and Historian.

His personal equipment is quite extensive, and is housed at his observatory that sports a 30" Cassegrain telescope. He hosts many observing sessions there for local school classes, scout troops, area colleges and universities, and his own Society. He has even loaned some if his equipment to Yerkes Observatory! This willingness to share his time, equipment, and expertise is only surpassed by the fun he has doing it. The members of his Society will tell you that the list of what he has taught them about astronomy is quite lengthy.

fathers of the Neville Public Museum Astronomical Society, and is also a member of the Northeast Wisconsin Stargazers.

Our recipient of the 1993 North Central Region Award is Ron Parmentier.



1993 NCRAL Regional Award winner Ronald Parmentier holds up the award plaque he has just received from Chairman Bachtell (left).

The meeting ended with Marion saying that she hopes to see all of us at the 1994 NCRAL Convention that will be hosted by the Southeastern Iowa Astronomy Club in Burlington, Iowa, on April 30, 1994.

A Ray of Hope in the Fight Against Light Pollution

by Dan Koehler
Milwaukee Astronomical Society

I am a firm believer that with time and intelligence, the problem of light pollution can be solved. Even if I am an old man by the time it finally happens, I hope I live to see the day when my children and grandchildren can enjoy the beauty and wonder of a starry night sky, unencumbered by the glow of terrestrial light sources, just as I did from the Wisconsin dairy farm I grew up on. Hopefully, I will never give up on this dream. And now, it is possible that my vision might just become a bit closer to reality.

Unbeknown to most Wisconsin amateur astronomers at the time, including myself, Assembly Bill 344 was introduced in the Wisconsin State Legislature on May 4, 1993. AB 344, if passed by a majority of the 99 Assembly Representatives and 33 State Senators next year, would require:

"the department of industry, labor, and human relations to promulgate rules regulating the design and installation of outdoor lighting to improve energy efficiency and to reduce inappropriate lighting. The bill also prohibits the sale or installation of mercury vapor outdoor lighting after December 31, 1994, and prohibits the construction of upwardly directed lighting on outdoor advertising signs after June 30, 1994".

Members of the Milwaukee Astronomical Society Board of Directors learned about AB 344 at their June 14 meeting. Unfortunately, the first (and so far the only) public hearing on the bill took place in Madison on May 18 before the Environmental Resources, Energy, and Utilities Committee. In late July, at ALCON '93 in Madison, Representative Jim Baumgart of Sheboygan (one of five cosponsors of AB 344) met with convention attendees to brief them on particulars of the bill and provide a status report. Baumgart, a Democrat, explained that his reasoning behind sponsoring the bill was mainly related to his strong feelings about the need for energy conservation. There are plenty of references to the economic consequences of good lighting in the bill, but one article does specifically state that a goal of AB 344 is to achieve:

"avoidance of interference with the functions of any astronomical observatory"

Readers can obtain a copy of the bill as originally drafted by writing to me at the address at the end of this article. Please include a self-addressed and stamped envelope. I will include a mailing list of legislators to contact with your opinions about the bill too.

The political situation in Wisconsin has changed rather dramatically this year, and these changes will have at least some effect on the fate of AB 344, if not a profound effect. Governor Tommy Thompson will be at the end of his second term in 1994. By most all indications now he will run for an unprecedented third four-year term, and could seek election to higher office in 1996. A Republican, Thompson's approval rating with state voters hovers in the area of 80%. He maintains a very probusiness and antiregulatory philosophy that plays quite well in a state known for its progressiveness. It is generally believed that many of his policies and programs have created a business haven in the state that has led to a prolonged economic expansion. Meanwhile, Democrats lost control of the 33-member State Senate in three special elections this past spring. They had held the majority in that chamber since at least the mid-1960's. The Democrats continue to hold a slim eleven seat majority in the 99-member State Assembly. All of this means that the nature of state government in Wisconsin is decidedly more conservative and probusiness than in the recent past. While this situation does not necessarily spell curtains for AB 344, it could be more difficult to persuade business-wary and regulatory-shy legislators on the bill's merits.

As of this writing in late October, AB 344 remains in the legislative committee. Chairman Peter Bock (D) of Milwaukee indicated to Rep. Baumgart that certain changes in wording would be necessary to move the bill on to the legislature's Joint Finance Committee and, hopefully, then on to the full Assembly. If passed by the Assembly, AB 344 would begin a confirmation process in the State Senate, where its chance of passage is less than it was in the Assembly. A probable public

was in the Assembly. A probable public hearing before the Senate's Environmental and Energy Committee awaits the legislation, followed by a vote in the full Senate, if it survives a committee vote. If the bill passed by the Senate is the same as that passed by the Assembly it would go to Governor Thompson, who has the strongest line-item veto in the United States at his disposal. If the bills differ in wording and content, a compromise must be reached in conference committee, and the resultant bill will need to be approved by both chambers of the legislature before Thompson sees it. In short, AB 344 has a long way to go, but it is on its way!

My efforts to date on behalf of AB 344 have been to inform anyone with an interest in astronomy about the bill, and to encourage a letter writing campaign directed at the members of the committee now handling it. Certainly every Wisconsin amateur and professional astronomer has something at stake in AB 344.

Also, any out-of-state amateurs who visit our state parks for observing should consider writing to the committee members to voice their opinions. This may carry some weight as the recreation and tourism industry has a significant impact on Wisconsin's economy. Do keep in mind that a light pollution bill won't eradicate light pollution in Wisconsin overnight, but it will set the stage for meaningful and intelligent changes in the way outdoor lighting is installed in the state over the next several decades. This in turn will help make my dream of statewide dark skies possible before I move to that "great observatory in the sky", so to speak!

Further, I believe that AB 344 could be a model bill for other Midwestern states to emulate. Are there any NCRAL members reading this in Michigan, Illinois, Iowa, Minnesota, or North Dakota who would like to present a copy to their state representatives for legislative consideration? Doesn't an upper Great Lakes dark-sky sanctuary have a nice ring to it?

There are questions remaining, however. Chairman Bock's requested changes in the verbiage of the bill have opened a compromise with would-be lighting offenders. The article concerning interference avoidance with any astronomical observatory has been

Defining Terms Used in Marketing New High-Tech Telescopes

by Jack Kramer

(In the past, we have reprinted definitions from the Lake County Astronomical Society's Observers Dictionary, compiled by Jack Kramer. In light of the latest changes in technology, here are the latest additions to this dictionary.)

With the addition of CCDs, and the new computer-controlled telescope drives, this may be your first brush with the arcane world of really high-tech. For our members who may be considering some of the advanced products now on the market, we are providing an interpretation of a few terms that you've no doubt seen widely used in advertisements.

All New - The power supply, connectors, and software are not compatible with previous versions. Even the screw threads are different.
Advanced Design - Salespeople don't understand it.
Breakthrough - It nearly worked on the first try.
Design Simplicity - It was developed on a shoestring budget.
Exclusive - We're the only ones who have the directions telling how to use it.
Field Tested - The manufacturer has no way to test it.
Foolproof Operation - It's unrepairable, short of sending it back to the factory (which can't fix it either).
Futuristic - It only runs with the help of a next-generation computer, which isn't available yet.
High Accuracy - The screw threads match the threads of the holes they're supposed to mate with.
It's Here at Last - We've released a 26-week project in 48 weeks.
Maintenance Free - see Foolproof Operation.
Meets or Exceed Optical Standards - We haven't the foggiest idea about the total wavefront accuracy.
New - It comes in a different color than the first version.
Performance Proven - It worked through beta test.
Quality Standards - It works most of the time.
Revolutionary - Everything that's supposed to go round and round actually goes round and round.
Satisfaction Guaranteed - We'll send you another manual if this one fails to work.
Stock Item - We shipped it once before and we can do it again, probably.
Unmatched - No one else wants to copy our design.
Unprecedented Performance - May mean two different things:
1. Actually worked the first time right out of the box.
2. Nothing before ever ran so erratically.

Years of Development - We finally got one to work.

changed to read:

"Avoidance, to the extent technically and economically feasible, of interference with the functions of any astronomical observatory operated by educational or research organizations."

Also, the outdoor advertising industry in Wisconsin views AB 344 as a threat to its existence due to an article in the bill that reads:

"After June 30, 1994, a person may not construct or install a light fixture to illuminate an outdoor advertising sign if the light fixture is located at or below the bottom edge of the sign and the light is directed upward to illuminate the sign."

Lobbyists for this industry contend the bill will put all outdoor advertising firms out of business due to their inability to convert all bottom-lit billboards by a specific deadline. They also feel that the bill's overall language singles out their industry as particularly offensive with regard to light pollution. My first reaction to this was one of cynicism ("Aw, shucks! That's too bad isn't it?"). Realistically though, the deadline must be lengthened, and the bill's harsh tone reduced to stand a chance of moving out of committee. Representative Baumgart has been working with legal authorities to change the bill's wording so as not insinuate that billboard businesses are especially profound offenders. The bill will be reworded to treat all upwardly directed lighting in the same manner. AB 344 faces opposition from other special interest groups, although it is not clear at the time of this writing how serious the opposition might be. I will be studying the results of the May 18 public hearing for clues to this and other questions yet remaining about the bill.

Everyone reading this is encouraged to help the letter writing campaign. Start by sending your thoughts about light pollution and your support for Assembly Bill 344 to:

Representative Peter Bock
Chairman of the Environmental
Resources, Energy, and
Utilities Committee
208 North, State Capitol
P. O. Box 8953
Madison, WI 53708
(608) 266-8580

It would be best to do this as soon as possible, and certainly before the end of November. As mentioned above, I'll send a copy of AB 344, a complete name and address list of all committee members, and reprints of my latest articles on the bill appearing in the Milwaukee Astronomical Society's newsletter to anyone who sends me an SASE.

Dan Koehler
W248 S7040 Sugar Maple Drive
Waukesha, WI 53186
(414) 662-2987.

On a hall wall at JPL:

We Have Your Satellite.

If you want it back, Send 20 Billion in Martian Money.

No Funny Business or you will never SeE it agAin.

Snagged from an Internet Humor posting.



At ALCon '93 former AL Sales Office Chairman Wilma Cherup (right) posses with the new Chairman Marion Bachtell. The Sales Office provides an outlet for League-created material. See your *Reflector* for more information on what is available from the Sales Office.

Sorry!

We are very sorry for the extreme lateness of this issue of *Northern Lights*. We have been swamped with work and are just catching up. The next issue will be out, on time, in late December 1993.