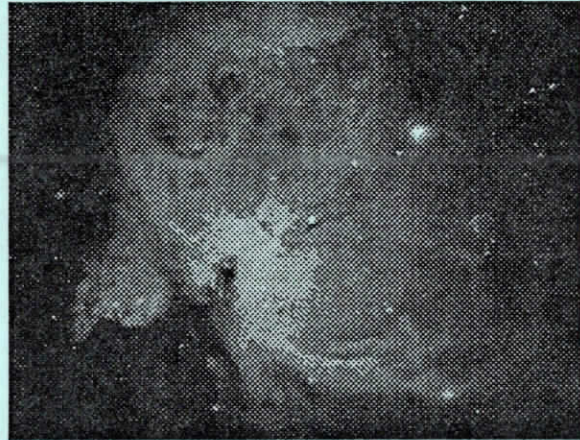


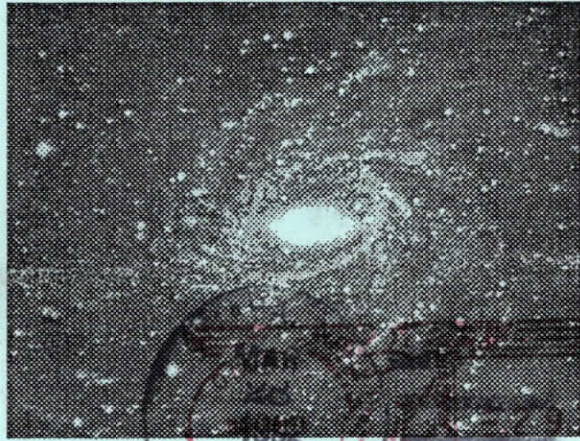
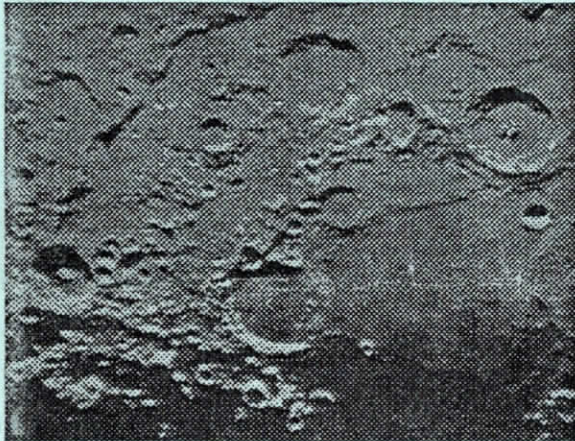
by huge numbers since then.

Alaskans, in typical fashion, have added two other attractions to their package for Japanese tourists—shooting and dog mushing. This winter, Steve Howdershell, a dog musher, has taken hundreds of Japanese into the bush on dog-sled rides and to fire rifles at targets.

“They’re shocked and horrified by the whole thing,” Mr. Howdershell said, speaking of the tourists’ reactions to the dogs and guns and, of course, the cold. “But God they love it.” ■



Three Images From Dave...



The Prairie Astronomer

c/o The Prairie Astronomy Club, Inc.

P.O. Box 80553

Lincoln, NE 68501

First Class Mail

91031 92/10 R
Duane Hutchinson
3445 Touzalin Ave.
Lincoln NE 68507

Next Meeting March 31, 1992

THE *Prairie* Astronomer

Volume 33 #3

March 1992

PRESIDENT'S MESSAGE

by *Dave Knisely*

Astronomy Day will be held on Saturday, May 9th at Mueller Planetarium on the UNL city campus. Setup will probably start after 8:30 a.m., with the exhibit open to the public from about 10:00 a.m. to 4:00 p.m., and teardown after that.

As in previous years, we will need something from everybody. Telescopes, binoculars, computers, video, posters, pictures, signs, models, and anything else which pertains to astronomy or space exploration will be needed. We will also need tables and chairs, poster stands (we can't tape anything to the walls of the lobby), extension cords, and people to staff the exhibit. And for those of you who think your telescope is too small or crude to bring: BRING IT ANYWAY! We need examples of all sizes and types of instrument used in our hobby. If you think you are too new to the hobby to be of any use, please come anyway. You can show the public why you got into amateur astronomy just as well as the old timers in our group. Signup sheets will be available at the meeting, or you can call Jack Dunn at the planetarium for more details. ■

The Theater Is Freezing, But the Show is Dazzling

From the *Sunday New York Times*

article by *Timothy Egan*

Chatanika, Alaska - At 3am a group of Japanese tourists on the hard snow stamped their feet on

the hard snow and pointed to the Alaskan sky. It was 35 below zero, and some of the visitors were on their honeymoon.

Without warning, an arc of green and white light appeared overhead—show time. The light band split into a fork, then rippled over the horizon, the curtain call of another grand display of the aurora borealis, or northern lights, in the bush country north of Fairbanks and close to the Arctic Circle.

What is different this year is that the lights have become an international tourist draw. To the surprise of many, Alaskans have figured out a way to sell the sky. Overwhelmingly, the buyers are Japanese. And their numbers are helping this state's economy smooth over the ups and downs of crude-oil prices.

Until a few years ago it was virtually impossible to coax visitors to Alaska in the middle of winter. What, after all, was there to see in the two or three hours of daylight during the darkest months of the season? Going outside requires enough insulation to pass the Anchorage building code. The bears are all hibernating, the moose are hungry and prone to cranky behavior, and the salmon are months away from the first big river run.

There was, as always, the brilliant streaking across the sky of the aurora, the charged solar particles that are drawn by magnetism to the Earth's polar zones. Although no one is ever sure when the lights will appear, any night from October to April is likely to bring a dramatic display. But nobody thought to capitalize on it until two year ago, when a Japanese television crew began broadcasting the northern lights from Alaska to a

Tokyo news show. Suddenly, thousands of potential visitors showed up at travel agencies asking about such backwaters as Chatanika, a former mining camp 30 miles northeast of Fairbanks.

"We never paid much attention to it because, what the hell, the northern lights are just up there in the sky, as always," said Connel Murray, the state's director of tourism. "But then our guy in Tokyo told us that there was a big demand for tours. And he said it's a favorite of honeymooners."

To some Japanese, the aurora borealis is the ultimate photographic quarry, a challenge not unlike a big game hunt. To many others, it has a spiritual and romantic calling.

"Many Japanese believe that if you consummate your marriage under the northern lights, you can expect a long and fruitful life," said Woody Kobayashi, and Anchorage tour operator who specializes in taking groups from Japan to see the lights.

One night recently a group of women waited patiently here inside a glass-covered cabin that the owners call the "aurora dome." When the lights at long last appeared, the women stampeded to the nearby bunkhouse to wake their new husbands.

But there are also groups of single young men and women. They said they came to Alaska in the dead of winter because they had heard it was a good way to meet members of the opposite sex. They paid up to \$5,000 for the privilege of spending a week or so at one of the coldest spots on Earth, dressed in what look like moon suits.

Masaaki Notani, a college student from

Osaka, rubbed his eyes one morning after a long, sleepless night of waiting for the lights to appear. He was looking forward to his next stop, the more temperate climate of Seattle, 2,000 miles to the south.

"This is very good," he explained in minimal English. "But it is much too cold. So cold it makes you crazy."

While this chill is numbing, there is perhaps no better place on the planet to watch the northern lights than the Alaskan interior north of Fairbanks. The skies are typically cloudless and the aurora is directly overhead, about 60 miles up. Scientists from two Federal agencies have set up a research complex on a nearby mountaintop, from which they have been launching rockets to photograph and study the northern lights.

The dancing aurora, which is never the same from one night to another, is an electrical discharge powered by interactions between the Sun and the Earth. Its glow is that of atoms and molecules in the Earth's upper atmosphere.

More than 20,000 Japanese visited Alaska last year; nearly 25 percent came for the northern lights. On average, the Japanese spend 50 percent more than tourists from the lower 48 states. They are one reason why tourism, which generated a billion dollars in revenue last year, has become the No. 2 industry in Alaska, behind oil. Officials say Alaska was brought to the attention of a world audience in 1989, when the tanker Exxon Valdez spilled 11 million gallons of oil into Prince William Sound. Tourism has grown

Continued Last Page...

Observing Chairman's Report

by Dave Knisely



THE NEXT SCHEDULED STAR PARTY WILL BE HELD FRIDAY, APRIL 3rd AT THE ATLAS SITE. Galaxies are the main course on the spring sky menu, but first, a last look at an interesting open star cluster, M67, located two degrees west of Alpha Cancri. Visible in binoculars as a faint fuzzy patch, this object will show stars when viewed in small instruments, although none of them seem very bright. An eight inch will reveal as many as 50 members in a moderate sized grouping.

Up north in Ursa Major are the bright galaxies M81 and M82. M81 can be found two degrees west and 3/4 degree south of 24 Ursa Majoris, and is visible in binoculars as a tiny fuzzy spot. Small telescopes show little detail in this spiral other than its overall oval form. M81's spiral arms are faint, thin, and fairly distant from the nucleus, requiring excellent conditions and large apertures to be visible at all.

Less than a degree north of M81 is M82, a long cigar-shaped fuzzy patch of light in small telescopes. A six or eight inch will sometimes show hints of dark detail close to the center of this irregular galaxy, but moderate to high powers must be used.

In western Leo about 1.5 degrees south of Lambda is the bright spiral galaxy NGC 2903. A 2.4 inch refractor at low power will show it as a moderate sized faint fuzzy oval patch with a brighter center. An eight inch will show signs of mottling in the outer haze, while a ten inch will reveal hints of the spiral structure.

Also in Leo is a nice trio of galaxies, M65, M66, and NGC 3628, located about halfway between theta and Iota. All three can be placed in a one degree field of view, with the two Messier objects being visible in 10x50 binoculars on a good night. M65 appears as an elongated fuzzy patch in small apertures, with little increase in

detail in larger instruments. On an excellent night, a ten inch may hint at a dark lane along the east side. M66 is a bit brighter and less elongated than M65. It looks a bit asymmetrical in a six inch, with an eight revealing hints of the west spiral arm. A ten will often show dark detail and vague indications of both arms, with the west one being longer and easier to see.

The third galaxy of the group, NGC 3628, is a faint edge-on spiral north of M65 and M66. It appears as a faint narrow streak in small to moderate instruments, with a ten inch showing a vague dark lane down the length of the galaxy.

In Coma Berenices is the interesting galaxy NGC 4274, located 1.5 degrees north and 1.5 west of Gamma. Visible in a four inch as a faint rather elongated fuzzy patch with a brighter center, this object shows hints of faint fans of light off each end when viewed in an eight inch aperture. A ten inch on a good night shows a hint of the eastern spiral arm, along with several other galaxies in the area.

In eastern Corvus is the famous "Ring-Tail" galaxy, NGC 4038, located 1.3 degrees south and 3.4 degrees west of Gamma. Faintly visible in a four inch telescope, this galaxy appears as a very faint diffuse oval of light with a protrusion on one end when viewed in a six inch. A ten inch shows hints of a patchy ring in the main galaxy along with the hook-like protrusion, making it look a bit like a shrimp. ■

The Prairie Astronomer is published monthly by the Prairie Astronomy Club, Inc., and is free to all club members. Membership status and expiration date are listed on the mailing label. Membership dues are: Junior Members and Newsletter Only Subscribers...\$10/yr; Regular Members...\$26/yr; Family Memberships...\$29/yr; Address all new memberships, renewals, or questions to THE PRAIRIE ASTRONOMY CLUB, INC., P.O. BOX 80553, LINCOLN, NE 68501. For other club information contact one of the following officers: Dave Knisely (Pres)223-3968, Eric Hubl (V.Pres)423-6267, Ron Veys (Sec)486-1449, Lee Thomas (Tres)483-5639, Jack Dunn (2nd V. Pres)475-3013. All newsletter comments and articles should be sent to Newsletter Editor JOHN LORTZ, 12023 PARKER PLZ #105, OMAHA, NE 68154 no later than 10 days before monthly club meetings. Club meetings are held the last Tuesday of each month at Hyde Observatory in Lincoln, NE.



MID-STATES

KC '92

1992

Mid-States

Regional Convention

of the

Astronomical League

*Sponsored by the
Astronomical Society of Kansas City*

You are invited to attend the 1992 Mid-States Regional Convention at Avila College in Kansas City, Missouri, beginning at 1:00 p.m. on Friday, June 19th and ending Sunday morning, June 21st.

Highlighting this year's convention will be a STAR-B-Q at Powell Observatory on Friday evening, an Astro-Trivia Contest, a great Saturday night 'Solstice Supper', solar observing, an Astrophotography Contest, some really GREAT speakers and a swap meet. We will vote on an Amateur of the Year, present Messier awards and we have a lot of fantastic door prizes lined up. All registration information is included with this information packet.

STAR-B-Q - Will be Friday night at Powell Observatory in Louisburg, Kansas, just twenty miles south of the convention location. Powell Observatory is owned and operated by the ASKC. After dinner, you will be able to look through our 30" Newtonian telescope, or just watch CCD images on a monitor. Yes, bring your own scope -- there is plenty of room around the observatory to set up.

SOLSTICE SUPPER - Will be held Saturday evening at RC's Restaurant, a short distance from Avila College. The food is some of the best in Kansas City. We will have a featured speaker, and special door prizes just for the banquet: a brass sundial among them! The dress is casual, and RC's is on the way to Powell Observatory for observing after the banquet, if you so desire!

SOLAR OBSERVING - Will be conducted both days, in the courtyard outside our meeting hall at Avila College.

ASTRO-TRIVIA CONTEST - ... or 'Jeopardy on Astronomy'. Get your team of four together before the convention, or sign up when you arrive to join with other individuals who want to play. We'll have all the electronic gadgetry and obscure questions ready!

SPEAKERS - Dr. Bruce Twarog of the University of Kansas; Dr. Lou Marshall of NASA; Paul Van Slyke, Director of the Black Forest Observatory in Colorado; one of NASA's Teacher in Space finalists; Michael Bakich, Director of the Kansas City Planetarium....and several more. Carl Sagan sent his regrets!

BUILD A DOBSONIAN - We will show you how to have a telescope-making workshop at a cost of about \$100 per telescope. We will build a 4.25 inch f/10 telescope during the convention and give it away as a door prize.

ASTROPHOTOGRAPHY CONTEST - Bring your best photos (any size) and enter! There will be one winner in each of the following categories:

Solar System: Color, Black & White, CCD and Video

Deep Sky: Color, Black & White, CCD and Video

Solar Eclipse of July 11, 1991:

Best Corona, Best Prominences, Best Stars & Planets and Best Video

That's twelve categories in all. If you have any questions, call Tom Martinez at (816)658-3959.

SWAP MEET & VENDOR DISPLAYS - Vendors will be on-hand to sell their merchandise: Astronomical Innovations, The Nature Company, telescopic equipment and accessory companies, photographic equipment and a meteorite collector--just for starters. There will also be plenty of room for you to sell your stuff so you can buy someone else's stuff!

MESSIER AWARDS - We plan to present awards to all attendees who have earned them...a little more recognition for a job well done. If you are close, get busy. Please let Kathy Machin, the National Awards Chairperson, know if you have completed yours (816)452-2086.

AMATEUR OF THE YEAR AWARD - Every year, a member in the region is recognized for their outstanding contributions in the field of amateur astronomy. If you wish to nominate someone, please tell us why in a letter, and send it to: Jackie Wade, M-S Chairman, 11305 King St., Overland Park, KS. 66210.

CONVENTION HISTORY - We are planning a display of old convention photos and other memorabilia -- please bring yours to share!

...and at our regional business meeting we will be voting to adopt a set of By-laws for the Mid-States Region.

Our goal this year is to learn what all clubs in our region are doing, and to have FUN. Some of our speakers will be very entertaining...but some serious as well. If you, or anyone in YOUR club, have done something exciting, or have something new to share, please let us know. We have room in the schedule for several more 'talks' -- just call our Program Chairman, Keith Green, at (816)322-6695, or write him at: 522 Second St., Belton, MO, 64012. You can also contact Jackie Wade, M-S Chair, at (913)469-0135, or write to: 11305 King, Overland Park, KS 66210.

AREA ACCOMMODATIONS

CAMPING

Free...on the grounds of Powell Observatory in Louisburg, Kansas. Primitive: No showers, no hook-ups; but, restrooms within walking distance. There are no close-by commercial campgrounds.

HOTELS

The following two hotels have given us substantial discounts on their normal rates (identify yourself with the "Astronomy Convention"):

Fairfield Inn (Marriott) I-435 & Roe, Leawood, KS

Up to four people in a room. Pool, HBO, & coffee. \$35.00 per night.

(913)381-5700

Drury Inn I-435 & Highway 169, Overland Park, KS

Up to four people in a room. Pool, Cable TV, continental breakfast, passes to Bally Health Club next door all included. \$43.00 per night.

(913)345-1500

Other Hotels:

Courtyard by Marriott (closest to convention) I-435 & Holmes, K.C. MO

\$49.00 to \$55.00 (816)941-3333

Motel 6 95th & I-35, Lenexa, KS

\$28.00 to \$46.00 (913)381-5700

Other hotels in area (Overland Park, or south Kansas City) Marriott, Best Western Overland Park Inn, Doubletree Hotel, Embassy Suites, Clubhouse Inn.

1992 Mid-States Regional Convention

REGISTRATION FORM

One form per individual or family, please.

Your Name: _____ Phone: () _____

Address: _____ City: _____

State: _____ Zip: _____ Club Affiliation (if any): _____

Other Family Members Attending: _____

REGISTRATION COST

Individual.....	\$20.00
Individual (After June 1).....	\$25.00
Family.....	\$30.00
Family (After June 1).....	\$35.00

Amount

Enter one Amount: _____

Commuter Fee: If you are not staying in the dorm for a minimum of two nights, or purchasing the "Meal Package" (below), the college requires a \$7.00 fee per person. Purchase of either a two-night dorm room, or the "Meal Package" (or both) eliminates paying this fee.

Number of persons: _____ X \$7.00 = _____

ON-CAMPUS ACCOMMODATIONS

(Dorm room, air-conditioning, two single beds per room)

Nights you plan to stay in the dorm: Thurs. Fri. Sat:

	No. nights	Charge	No. persons		
One in a room with Linen*	_____ X	\$16.00	X _____	=	_____
One in a room without Linen	_____ X	\$13.00	X _____	=	_____
Two in a room with Linen*	_____ X	\$14.00	X _____	=	_____
Two in a room without Linen	_____ X	\$11.00	X _____	=	_____

*Linen = 2 Sheets, 1 Bedspread, 1 Pillow & Case, 2 Towels & 1 Wash Cloth

If you have chosen a dorm roommate please

specify their name: _____

CAMPING (primitive) -- On the grounds of Powell Observatory

Free -- Check here if you plan to camp:

MEALS

"Meal Package" (includes four meals listed next)

If purchased individually:

Friday morning brunch (10:30 a.m. to Noon)

Saturday morning breakfast

Saturday lunch

Sunday breakfast

No. persons

_____ x \$18.00 = _____

_____ x \$ 7.00 = _____

_____ x \$ 3.50 = _____

_____ x \$ 4.00 = _____

_____ x \$ 3.50 = _____

_____ x \$14.00 = _____

SOLSTICE SUPPER (Sat. night) Don't Miss!

Not part of the "Meal Package". Yes, your guest(s) may attend this without paying any other fees.

Note: FANTASTIC food, SPECIAL door prizes and a GREAT speaker!

(No extra charge for Friday night Star-B-Q!)

Total Enclosed: _____

Send registration form and check (made out to Mid-States Regional) to:
1992 Mid-States Regional, P.O. Box 400, Blue Springs, MO 64013

This form may be copied for additional registrations.

Questions? Call Gary Pittman, Registration Chairman, at (816)228-4238 after six p.m.

Note: Further information on the convention, along with maps, directions, phone numbers, etc. will be mailed to you with your Registration Confirmation.