



CAPE FEAR

Skies

A MONTHLY NEWSLETTER
OF THE
CAPE FEAR ASTRONOMY CLUB

VOLUME 2, No. 9

SEPTEMBER 1987

MEMBERS:

OUR NEXT MEETING WILL BE ON SUNDAY SEPT 6, AT 7:00 PM. MORTON HALL AT UNC-W. PLEASE NOTE THE EARLIER MEETING TIME.

UNFORTUNATELY, THIS WILL BE MY LAST NEWSLETTER. DUE TO A RECENT DEATH IN MY FAMILY AND FORTHCOMING FAMILY OBLIGATIONS, I WILL NOT HAVE THE TIME TO DEVOTE TO THE LETTER. PLEASE BE ASSURED THAT THE NEWSLETTER WILL CONTINUE. A PUBLICATION COMMITTEE WILL BE FORMED TO HANDLE THE WORK THAT GOES INTO THE NEWSLETTER. IF YOU ARE INTERESTED IN JOINING THIS COMMITTEE, PLEASE ATTEND THE SEPTEMBER MEETING. WE WILL NEED PEOPLE FOR RESEARCH, TYPING, PUBLICATION AND MAILING. CONRAD HAS ALREADY VOLUNTEERED TO DO THE LAY-OUT GRAPHICS.

I HOPE THAT ALL OF YOU HAVE ENJOYED THE LETTER AND I HOPE TO BE ABLE TO HELP WITH IT AS MUCH AS I CAN.

AT THIS MEETING, WE WILL ALSO BE SETTING UP OTHER COMMITTEES TO FURTHER THE PROGRESS OF THE CLUB. SOME OF THOSE WILL BE;

PUBLIC EVENTS/RELATIONS	FUND RAISING
OBSERVATORY RESEARCH/DEVELOPEMENT	CLUB FUNCTIONS
OBSERVING SESSIONS	REFRESHMENTS

THESE ARE JUST A FEW OF THE THINGS THAT THE CLUB NEEDS TO ORGANIZE. WE WILL NEED HELP FROM EACH AND EVERY MEMBER WITH THESE COMMITTEES. IF YOU FEEL THAT YOU COULD HELP OUT, PLEASE LET THE OFFICERS KNOW. EVERYONE IS ENCOURAGED TO PARTICIPATE!

ON SATURDAY, SEPTEMBER 12, WE ARE PLANNING AN ALL DAY WORK SESSION, A RETREAT SO TO SPEAK. DURING THIS TIME, THE OFFICERS AND MEMBERS OF THE CLUB WILL MEET FOR THE DAY TO DISCUSS THE UPCOMING YEAR AND THE MANY EVENTS WE HAVE PLANNED ALREADY AND PLAN NEW EVENTS. WE ARE TENTATIVELY PLANNING TO HAVE A COOK-OUT AT THE END OF THE DAY. THIS SESSION IS OPEN TO ALL MEMBERS AND YOU ARE ENCOURAGED TO COME AND GIVE YOUR VIEWS AND IDEAS. THE PLACE AND TIME ARE BEING PLANNED AS OF THIS WRITING. MORE INFO WILL BE MENTIONED AT THE UPCOMING MEETING.

MORE NEWS.....

WE WILL BE CHANGING THE FORMAT OF OUR MEETING SOMEWHAT, SO THAT THE TIME WE SPEND CAN BE BETTER UTILIZED. ALAN WILL BE EXPLAINING THE NEW FORMAT AT THIS MEETING. PLEASE TRY TO ATTEND SO ALL THE MEMBERS WILL KNOW WHAT THE CLUB IS DOING.

THIS IS AN IMPORTANT TIME FOR OUR CLUB. WE HAVE GROWN VERY FAST IN THE PAST YEAR. WE NEED NOW TO GET ALL OUR MEMBERS ACTIVE IN CLUB FUNCTIONS. THE OFFICERS WANT TO THANK ALL THOSE MEMBERS WHO ALREADY PARTICIPATE AND ENCOURAGE OTHERS TO DO SO ALSO. THIS IS YOUR CLUB, LETS MAKE IT THE BEST WE CAN.

FOR THOSE OF YOU WHO DON'T HAVE THE NUMBER FOR SKYLINE, HERE IT IS. 1-617-497-4168. THE CALL WILL COST YOU 50 CENTS BUT THE INFORMATION YOU HEAR IS WELL WORTH IT. THIS SERVICE IS PROVIDED BY SKY AND TELESCOPE MAGAZINE. THE INFORMATION IS UPDATED EVERY FRIDAY OR WHEN LATE-BREAKING NEWS COMES IN SUCH AS A COMET DISCOVERY. IT IS A RECORDED MESSAGE UP TO 3 MINUTES LONG GIVING YOU THE LATEST GOINGS ON AROUND THE SKY.

THE CLUB IS PLANNING TO HAVE A TELESCOPE EXHIBIT THIS YEAR AT RIVERFEST. THE WEEKEND OF OCTOBER 3rd & 4th. ANY MEMBERS INTERESTED IN HELPING WITH THE EXHIBIT SHOULD CONTACT ALAN OR PAUL.

FOR OCTOBER.....WE WILL HAVE A PUBLIC OBSERVATION SESSION FOR THE OPPOSITION OF JUPITER. THIS EVENT IS BEING HELD IN COOPERATION WITH THE FT. FISHER MUSEUM. WE'RE HOPING FOR AS BIG A TURN-OUT AS THE ONE WE HELD EARLIER THIS SUMMER. MORE DETAILS AT THE MEETING.

FOR NOVEMBER.....IT'S TIME TO CLEAN OUT YOUR ATTIC AND DONATE ALL THAT STUFF TO THE CLUB FOR OUR YARD SALE. IT WILL BE HELD ON SATURDAY, NOVEMBER 7th. ALL THE MONEY WE RAISE WILL BE PUT IN FOR SHIRTS, HATS, FILMS AND EDUCATIONAL MATERIAL FOR THE CLUB. SEE PAUL AT THE MEETING FOR INFO ON WHERE TO DROP OFF YOUR GOODIES.

RONNIE HAS INFORMED US THAT THE SUN SEARCH NETWORK, OF WHICH HE IS A MEMBER, HAS DISCOVERED IT'S FIRST SUPERNOVA. IT WAS SPOTTED BY A MEMBER IN CALIFORNIA ON AUGUST 14th LOCATED IN THE GALAXY NGC-2366. RIGHT NOW, IT'S ABOUT 14th MAGNITUDE. WE'LL BE WAITING FOR MORE INFORMATION ON THIS NEW FINDING AS IT COMES IN.

RONNIE WILL AGAIN BE TEACHING ASTRONOMY THIS YEAR THROUGH CAPE FEAR TECHNICAL INSTITUTE. CLASSES WILL BEGIN OCTOBER 6th AND WILL BE HELD ON MONDAY NIGHTS FROM 7:30PM TO 9:30PM AT ROLAND-GRISE SCHOOL. REGISTRATION FEE IS \$15.00 PER STUDENT. SENIOR CITIZENS AREN'T REQUIRED TO PAY A REGISTRATION FEE. THE CLASS WILL RUN ABOUT 12 WEEKS A MINIMUM OF 5 OR 6 STUDENTS IS REQUIRED FOR THE CLASS TO BE HELD, SO IF YOU WOULD LIKE TO TAKE THIS CLASS, CONTACT RONNIE AT 762-1033 OR AT THE MEETING.

WELCOME TO OUR NEWEST MEMBERS..... TOM JACOBS AND HERMAN BRYANT.

MARTIN BEST IS INTERESTED IN CONTACTING ANY MEMBER THAT IS INTERESTED IN OBSERVING SUN SPOTS. HE TRYs TO OBSERVE THEM DAILY AND WOULD LIKE TO EXCHANGE INFORMATION WITH OTHER MEMBERS. CONTACT HIM AT THE MEETING OR 799-8218.

A FEW OF OUR MEMBERS ARE PLANNING TO ATTEND THE THIRD ANNUAL STAR-GAZE SPONSORED BY THE CATAWBA VALLEY ASTRONOMY CLUB ON SEPTEMBER 19th AND 20th. THE SIGHT IS A FEW MILES SOUTH OF BOONE, NC ON THE BLUE RIDGE PARKWAY. THE SKIES ARE DARK UP THERE!!, AND THE VIEWING PROMISES TO BE GREAT. ANYONE INTERESTED IN MORE INFORMATION, PLEASE CONTACT PAUL OR RONNIE AT THIS MEETING

COMET BRADFIELD, DISCOVERED AUGUST 11th, WILL BE MOVING INTO BETTER VIEWING SOON. RIGHT NOW IT IS AT ABOUT 8.8 MAGNITUDE. COORDINATES FOR 0 h U.T. ON AUGUST 29th ARE 14h 39m r.a. AND dec -19.4 DEGREES. IT WILL REACH PERIHELION ON NOV 7th.

OBSERVING THE PLANETS.....

JUPITER

JUPITER IS THE LARGEST PLANET IN THE SOLAR SYSTEM. IT IS ELEVEN TIMES LARGER THAN THE EARTH AND HAS OVER ONE THOUSAND TIME THE VOLUME OF EARTH. ON THE 18TH OF OCTOBER, OPPOSITION, IT WILL BE CLOSER TO THE EARTH THAN IT WILL BE AGAIN ANY TIME THIS CENTURY. MAGNITUDE WILL BE ABOUT -2.5 AND IT WILL SHOW A DISK ABOUT 50 ARC SECONDS ACROSS.

WITH A SMALL TELESCOPE, YOU CAN SEE LIGHT AND DARK BANDS ACROSS JUPITER'S DISK. THE LIGHT BANDS ARE CALLED ZONES AND THE DARK BANDS ARE CALLED BELTS. IN LARGER SCOPES THESE ZONES AND BELTS SHOW SUBTLE COLORS. THE BELTS AND ZONES REPRESENT CLOUDS THAT ARE DRAWN OUT INTO LONG STREAKS AS THE PLANET ROTATES. THE ROTATION OF JUPITER ALSO CAUSES THE PLANET TO BULGE AT THE CENTER. THIS BULGE IS VERY VISIBLE, EVEN WITH A SMALL SCOPE.

THE LARGE REDDISH REGION ON THE PLANET, THE GREAT RED SPOT, HAS DELIGHTED OBSERVERS FOR HUNDREDS OF YEARS. THIS "SPOT" MEASURES 14,000 BY 30,000 KM AND IS MUCH LARGER THAN EARTH. IT IS ACTUALLY A GIANT STORM IN JUPITER'S CLOUDS. IT IS MORE VISIBLE SOMETIMES THAN OTHERS. TO CATCH A GLIMPSE OF IT, YOU'LL NEED A GOOD MEDIUM SIZED SCOPE AND SOME PRETTY GOOD SKIES.

THE FOUR BRIGHTEST MOONS, IO, EUROPA, GANYMEDE, AND CALLISTO, ARE EASILY SEEN WITH EVEN A SMALL SCOPE. IF YOU OBSERVE THEM FOR A FEW NIGHTS IN A ROW, YOU'LL NOTICE THAT THEIR RELATIVE POSITIONS CHANGE FROM NIGHT TO NIGHT. YOU'LL BE ABLE TO SEE THEM MOVE IN FRONT OF OR BEHIND THE PLANET IF YOU WATCH THEM CAREFULLY. THESE MOONS CAN BE AS BRIGHT AS 4.6 MAGNITUDE; GANYMEDE IS USUALLY THE BRIGHTEST, AND THE OTHERS FOLLOW CLOSELY AT ABOUT 5th OR 6th MAGNITUDE.

THE VOYAGER SPACECRAFT 1 AND 2 FLY-BY'S IN 1979 AND 1980 DISCOVERED A THIN RING AROUND THE PLANET. IT IS MUCH TOO FAINT TO BE DETECTED BY ORDINARY MEANS FROM EARTH. PERHAPS NASA'S GALILEO MISSION TO JUPITER TENTATIVELY SET FOR LATE 1989 WILL SHOW MUCH MORE DETAIL OF THIS RING AND OF THE ENTIRE PLANET.

HERE ARE SOME TIPS ON OBSERVING JUPITER... COUNT, SKETCH AND NOTE THE COLORS OF THE BELTS AND ZONES ON THE DISK. IF POSSIBLE, OBSERVE AND SKETCH THE GREAT RED SPOT AND ANY OTHER DISTURBANCES IN THE ATMOSPHERE. NOTICE THE OBLATENESS OF THE DISK. OBSERVE AND IDENTIFY ANY MOONS THAT ARE VISIBLE. AND AS ALWAYS, NOTE YOUR SKY CONDITIONS AND OBSERVING SITES AND TIMES.

FOR THOSE OF YOU THAT WANT TO MAKE SOME SKETCHES, PLANETARY OBSERVATION FORMS ARE AVAILABLE FROM THE CLUB.

DID A COMET STRIKE THE EARTH MILLIONS OF YEARS AGO??? THE GEOGRAPHICAL SOCIETY OF CANADA HAS RECENTLY ANNOUNCED THE DISCOVERY OF A LARGE CRATER UNDER THE ATLANTIC OCEAN ABOUT 120 MILES SOUTHEAST OF NOVA SCOTIA. AFTER ANALYZING THIS PECULIAR ROUND STRUCTURE, CANADIAN SCIENTISTS HAVE DETERMINED THAT IT IS INDEED A LARGE IMPACT CRATER. THE CRATER IS MORE THAN 30 MILES ACROSS AND HAS A RAISED CENTRAL MOUNTAIN LIKE THOSE CRATERS SEEN ON THE MOON. THEY HAVE CALCULATED FROM THE CRATER'S SIZE, THAT THE OBJECT RESPONSIBLE MUST HAVE BEEN MORE THAN A MILE ACROSS.

THERE IS EVIDENCE OF OTHER UNDERWATER CRATERS, BUT THIS IS THE FIRST TO BE DISCOVERED "INTACT". THE CRATER WAS FIRST FOUND BY AN OIL EXPLORATION TEAM IN 1974 BUT THOUGHT TO BE A VOLCANIC DOME OR SALT DOME, A GEOLOGICAL FORMATION THAT OFTEN CONTAINS OIL.

ACCORDING TO FINDINGS BY GEORGIA PE-PIPER OF ST. MARY'S UNIVERSITY AT HALIFAX NOVA SCOTIA, THE CRATER WAS FORMED, GOUGED OUT, ABOUT 50 MILLION YEARS AGO. TOO LATE, ACCORDING TO PE-PIPER TO BE RESPONSIBLE FOR THE DISAPPEARANCE OF THE DINOSAURS, BUT POSSIBLY CAUSED THE DEMISE OF OTHER CREATURES. SCIENTISTS ARE ALREADY LOOKING FOR ANY MASS EXTINCTION ABOUT THAT TIME.

EVEN THOUGH THE CRATER WAS HARD TO FIND, AND IS IN ABOUT 350 FEET OF WATER, RELATIVELY INACCESSIBLE FOR STUDY PURPOSES, IT IS LIKELY TO TELL GEOLOGISTS ALOT MORE ABOUT CRATER FORMATION THAN ANY LAND CRATER WOULD, AS EROSION TAKES PLACE MUCH FASTER ON LAND AND THE STRUCTURE IS DESTROYED MUCH MORE QUICKLY