



OBSERVATIONS



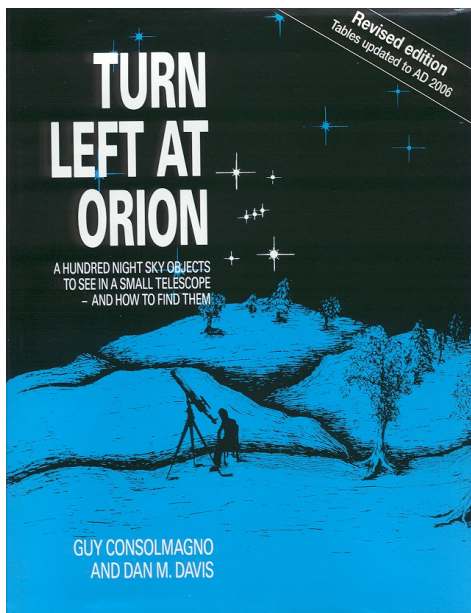
A MONTHLY PUBLICATION OF THE
Chester County Astronomical Society

★ *President:* Mike Turco
★ *Treasurer:* Pete LaFrance

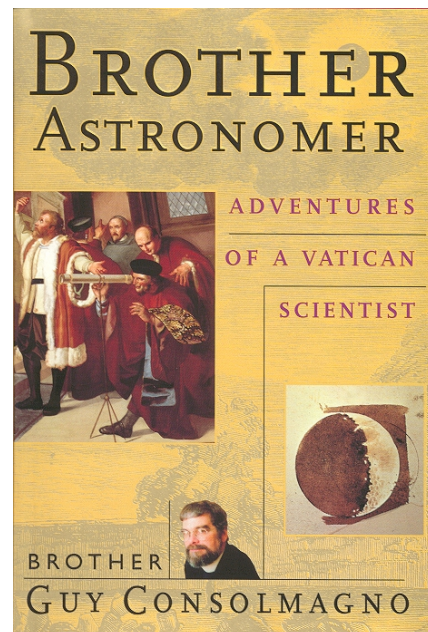
APRIL 2000
(VOLUME 8, NO. 4)

★ *Vice President:* Steve Limeburner
★ *Secretary:* Doug Liberati

http://members.tripod.com/~ccas_2/ccas.html



Author Guy Consolmagno to speak at the April CCAS Meeting!



CCAS April Meeting

DATE: **Tuesday April 11, 2000**
TIME: 7:30 p.m. EST
PLACE: Department of Geology and
Astronomy Lecture Room
(Room 113, Boucher Building)
West Chester University
LOCATION: South Church Street
West Chester, PA
(see map)

Parking is available behind Sykes Student Center on the south side of Rosedale Avenue, and behind the Bull Center at the corner of Rosedale Avenue and South High Street. If you arrive early enough, you may be able to get an on-street parking space.

CCAS meetings are always open to the public, and free of charge. Children are welcome as long as they are accompanied by an adult.

Author and astronomer Brother Guy Consolmagno, S.J., Ph.D. will be our guest speaker in April. Brother Consolmagno will share an illustrated discussion entitled "Turn Left at Orion: Starhopping for Fun and Prophet". Based on the book *Turn Left at Orion*, which he co-authored with Dan M. Davis, the talk will cover highlights of the book, various stories of how it got to be written... and what's in store for the future. McGraw-Hill has just released Guy's latest book, *Brother Astronomer: Adventures of a Vatican Scientist*. This new book is a memoir of his interesting journey through life, science, and faith.

Guy Consolmagno earned his Ph.D. in Planetary Science at the University of Arizona, and went on to teach at M.I.T. until 1983. At that time he joined the Peace Corps. In 1990 he joined the Society of Jesus as a brother of that Roman Catholic religious order. Shortly after that, he was appointed to the staff of the Vatican Observatory, where he is the curator of one of the world's largest meteorite collections. Brother Consolmagno has continued his research on meteorites, collected meteorites in Antarctica, and published a number of scientific articles. He spends "half my year living and working at the Specola Vaticana headquarters in the Papal Palace at Castel Gandolfo; half my year at the Vatican Observatory Research Group in Tuscon, Arizona; and half my year on the road." We have the opportunity to spend a few hours with him because he is spending this half of his year as a visiting professor at St. Joseph's University in Philadelphia. Don't miss this unique experience!

CCAS ASTRONOMY DAY ACTIVITIES

SATURDAY APRIL 8, 2000

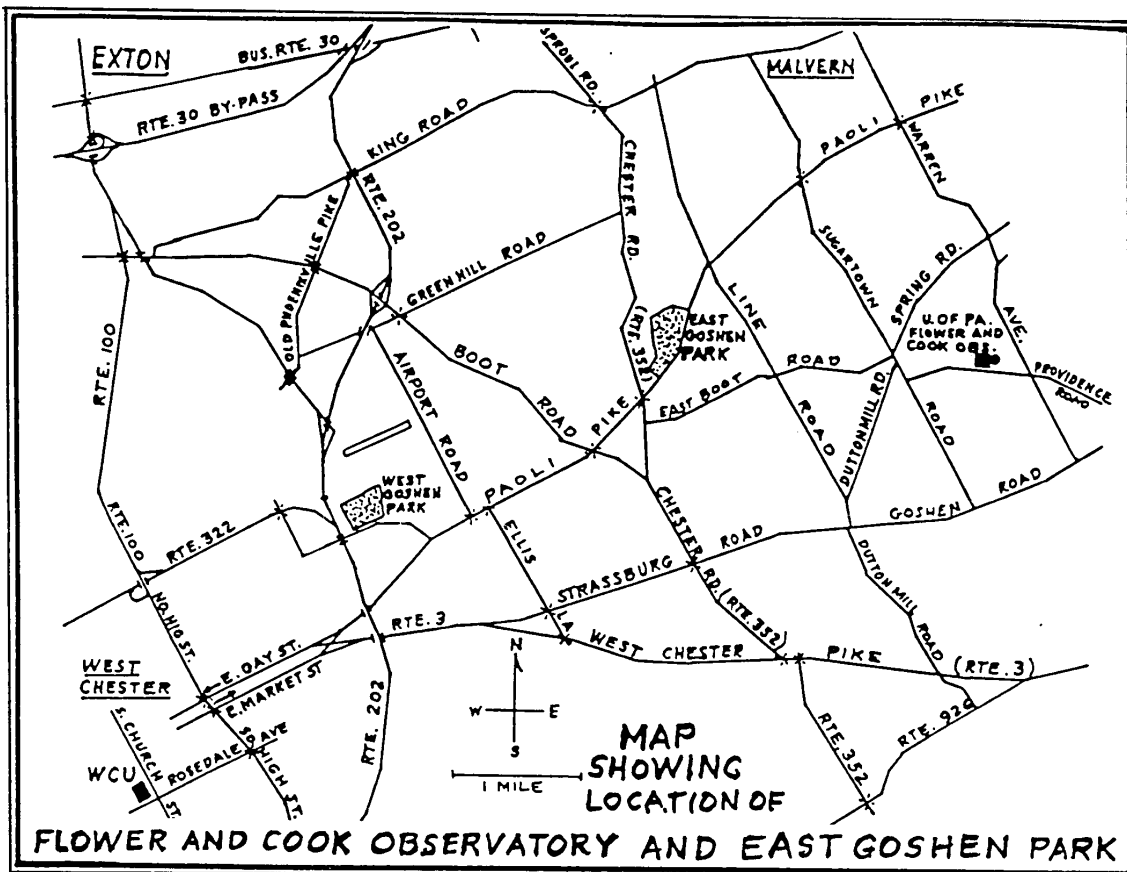
Daytime Activities at the Exton Mall - 10:00 a.m. to 4:00 p.m.

Evening Activities at the Flower & Cook Observatory in Malvern - 7:00 p.m. to ??

This year the Society will have a display and activities at the Exton Square Mall during the daytime hours, 10:00 a.m. to 4:00 p.m. EDT. The Mall Management has graciously given us permission to set up in the "North Court": this is the open area in front of the north entrance to Strawbridge's, where there is also a Mall entrance. If you are bringing anything for the display, go to that entrance to the Mall. It is usually open by at least 9:30 a.m. for "mall walkers" and employees to get in. The Mall is providing us with 2 8-foot tables, some chairs, some easels, and electricity. If it is clear that day, we have permission to set up a telescope outside that entrance for solar observing; there are power outlets out there that we can also use. Mike Turco (610-399-8398) and Ed Lurcott (610-436-0387) are coordinating this part of the program. Please consider helping out, even if you can only come out for an hour or so: then other people who are there longer can take breaks, eat lunch, that sort of thing. You really don't have to be super knowledgeable to help out; just friendly and willing to talk to people a bit about the Society and astronomy in general.

Then in the evening we will combine forces with the University of Pennsylvania's Flower and Cook Observatory in Malvern for a program that will begin about 7:00 p.m. EDT. This program will be observing-oriented. We will be passing out flyers at the Mall during the day, telling about the evening program and giving maps/directions to the Flower & Cook. Again, we encourage everyone to turn out for the evening program, and to bring your telescopes along if you have one.

And, just in time for the Astronomy Day festivities, the Society's new 20" club telescope is finished and will be on display at the Mall. If the skies are clear on Saturday night, the 20" may see "first light". Don't miss the "Big Debut"!!



This is How You Build a Monster Telescope...



Here we see Steve Limeburner (on the left) and Bill O'Hara hard at work on a chilly Sunday afternoon, March 12. Steve is sanding the bottom of the rocker box to prepare it for assembly and finishing. Bill is also sanding; he is working on one of the sides of the main rocker box.

Here we see Ed Lurcott's son Steve working on the main rocker box on a warmer Sunday afternoon, March 26. In the left foreground you can see that the main rocker box has been assembled, and the outside bottom of it has just been coated with contact cement. Steve is now coating the "back" side of the sheet of Formica that will be glued to the bottom of the rocker box.



Here we see Steve Lurcott, again on March 26. The Formica sheet has been cemented to the bottom of the rocker box, and then rolling pins were used to smooth it out and press out air bubbles. Now that the cement has set firmly, Steve is using a router to trim the edges of the Formica. Ed says that "Steve is the carpenter in the family".



We have pictures of the finished, assembled telescope (minus the mirrors, we haven't put those in yet). Ed assembled it all together on the weekend of April 1/2. We're not printing those (at least, not yet). You'll have to come out on Astronomy Day, to the Mall and/or the Observatory, if you want to see it.

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Public Open House: F & C Observatory

There will be a **FREE** public open house program at the University of Pennsylvania's Flower & Cook Observatory in Malvern, PA on Friday April 28, 2000. The program starts at **8:00** p.m. EDT with a talk on "The Tenth Birthday of the Hubble Space Telescope" by Dr. Jeff Goldader of the University of Pennsylvania. If the skies are clear, there will be observing with the Observatory's telescopes. Children are of course welcome as long as they are accompanied by an adult. The Observatory is located on Providence Road, just west of the intersection with Warren Avenue. A map is included on a later page.



Telescopes and Members Needed: FCO

There is a star night for 2 troops of Girl Scouts (a Brownie Troop and a Junior Troop) on Friday April 7 at 7:00 p.m. EDT at the Flower & Cook Observatory in Malvern.

There is also a star night for a den of Cub Scouts (7 3rd graders) of Cub Scout Pack 7 on Friday April 14 (rescheduled from 2/11) at 7:00 p.m. EDT.

We could use some help from CCAS members, with or without telescopes, to assist with this event. Those without telescopes can assist with pointing out stars, planets, and constellations. These events are always fun and fulfilling, because many of these children will be looking through telescopes for the first time. Remember the first time you saw Jupiter or Saturn through a good telescope? Share the magic!



Telescopes and Members Needed: June 6

Mark your calendars for Tuesday June 6 for our Third Annual Star Night at East Goshen Township Park. This event will start at about 8:00 p.m. EDT. The rain date will be the next day, Wednesday June 7. We will set up on the soccer field(s) as we have in years past. If you have any questions, contact Observing Chair Ed Lurcott at 610-436-0387.



Calendar Notes

May 5/6, 2000: (Friday)	CCAS Observing Session Brandywine Valley Association
May 9, 2000 (Tuesday)	CCAS Meeting Topic: TBA 7:30 p.m. EDT
June 2, 2000 (Friday)	CCAS Meeting & Observing Session BVA 7:30 p.m. EDT
July, 2000 (Friday)	CCAS Meeting & Observing Session BVA 7:30 p.m. EDT



April Skies

Moon Phases

New Moon	04/04
First Quarter	04/11
Full Moon	04/18
Last Quarter	04/26

The Planets

Mercury is low in the morning sky in April and tough to see.

Venus is very low in the morning sky this month.

Mars is low in the southwest at sunset. It's now very far away from us, so even a telescope won't improve much on the naked-eye view. Watch Mars "dance" with Jupiter and Saturn this month as the three planets will be close together and changing positions.

Jupiter is the brightest "star" in our evening skies this month, and very easy to find

Saturn is near Jupiter all month, making it easier to find.

Uranus and Neptune are now rising in the middle of the night.

Pluto is high in the south as dawn breaks, but finding Pluto requires at least a 10" telescope, dark skies, good charts, and lots of patience.



CCAS Observing Session

There is a CCAS Observing Session on Friday March 31, 2000 (cloud date is Saturday April 1). Unfortunately, you will not get this newsletter before then. April's Session was listed in the "Calendar Notes" in last month's newsletter, so I hope you all marked your calendars then. The next Observing Session is scheduled for Friday May 5 (cloud date is Saturday May 2). The Observing Sessions start at about 6:00 p.m. or earlier, if you can get there earlier to set up before darkness falls. At the observing sessions, there is help available to set up and use your telescopes. If you're having trouble using your telescope, or finding your way around the sky, come on out and get some assistance. All members are invited whether they have a telescope or not. Telescope owners are always glad to share the view through their `scope. CCAS Observing Sessions are always free of charge. Children are always welcome as long as an adult accompanies them. Make sure to dress warmly, as it gets cold rather quickly at this time of year.

To get to the observing site at the BVA, turn off Route 842 into the parking lot by the office: look for the signs to the office along Route 842. From that parking lot, go up the farm lane to the left; it's about 800 feet or so to the top of the hill. If you arrive after dark, please turn off your headlights and just use parking lights as you come up the hill.



Telescopes and Members Needed: May 19

The Society is providing an astronomy program for a Girl Scout campout on Friday May 19 at Hibernia County Park. This event will start at about 8:00 p.m. EDT. We will set up in the area near the Fiddler's Field bandshell. If the weather is bad, we can use the bandshell for a program. We ARE the program for that evening, rain or shine. If you have any questions, contact Observing Chair Ed Lurcott at 610-436-0387.



Mason-Dixon Star Party: June 23-25, 2000

The 11th Annual Mason-Dixon Star Party is being held on Friday June 23 through Sunday June 25 this year. This excellent star party, with good dark skies, is hosted by the York County Astronomical Society and the York County Department of Parks and Recreation. It is held at Spring Valley County Park. This year's guest speaker is Dr. Larry Marshall of Gettysburg College. Ed Lurcott has heard Dr. Marshall before, and says that he is a good speaker. For more information, contact Ed Lurcott. He has copies of the flyer and registration form.



News from Neighboring Societies

[Editor's Note: All that is required to have notices published here is to include Jim Anderson on the mailing list of your society's newsletter. See below for Jim's address.]

From *Focus*, the newsletter of the Delaware Astronomical Society:

Upcoming Meeting Topics and speakers:

April 18, 2000 (Tuesday) 8:00 p.m. EDT	"Cosmology's Embarassments" by Billie Westergard
May 16, 2000 (Tuesday)	Annual Dinner Meeting "The Art & Science of Early Star Atlases" by Ray Harris, Treasurer of Lehigh Valley Amateur Astronomy Society
June 20, 2000 (Tuesday) 8:00 p.m. EDT	"Variable Stars" by Dr. Judi Provencal, MCAO Resident Astronomer

DAS meetings are held at the Mount Cuba Observatory in Greenville, Delaware, just to the north of Wilmington. For more info contact President Warren Jacobs (610-566-0510). Or check their Website at:
<http://www.physics.udel.edu/>



CCAS Newsletters Now Available via E-mail

With this issue of *Observations* we are announcing a new service for members. You can now receive the monthly newsletter by e-mail. When the newsletter is finished, I convert it to a special type of file (a .pdf, for Portable Document Format) using a utility called Adobe Acrobat. Then all you need on your PC, besides an Internet connection with e-mail, is the Adobe Acrobat Reader program for your PC or Mac. This program is available free of charge from Adobe. Just connect to their Website at www.adobe.com and follow the links and directions for downloading and installing the correct Reader program for your PC or Mac. On the main screen (home page) of Adobe, at the top look for a "button" labeled "Products" and click it. On the next screen, scroll down to where it says "Adobe Acrobat Reader", and click that. Then click on "Download Now". Make sure the version number of the Reader you get is at least 4.0 because I'm using Adobe Acrobat version 4.0 to make the .pdf files. If you have an earlier version of the Reader, like 3.0, you'll have problems reading the files I make with Acrobat 4.0. The 4.0 Reader, however, can read 3.0 files without a problem, so if you're currently using a 3.0 Reader you will still be able to read older files produced by Acrobat 3.0 if you upgrade your Reader to 4.0.

Once you've done that, then just send me an e-mail to let me know you want to switch to e-mail delivery of the newsletter. The biggest advantage of getting your newsletter this way is you get it two to three days earlier. Another of the advantages of getting the newsletter this way is that the photos and/or drawings that are color in the original will be in color in your copy of the newsletter. When we make the paper copies for mailing, they get copied in black & white, and sometimes the copy quality of pictures is not good. Another advantage is that getting your newsletter by e-mail will save the Society money in copying and mailing expenses. In the past year some issues have cost the Society \$75.00 and more in copying and mailing costs. So if you want your newsletter by e-mail, send me an e-mail at sny114@aol.com and I'll get you set up on the e-mail distribution list.



Contributing to *Observations*

Contributions of articles relating to astronomy and space exploration are always welcome. If you have a computer, and an Internet connection, you can attach the file to an email message and send it to the editor at jim.anderson@hbc.com. Or mail the contribution, typed or handwritten, to:

Jim Anderson
19 Bluff Road
Thorndale, PA 19372-1104



CCAS Lending Library

Contact our Librarian, Bill O'Hara, to make arrangements to borrow one of the books in the CCAS lending library. Copies of the catalog are available at CCAS meetings. Bill's phone number is 610-696-1422.



CCAS Lending Telescope

Contact Kathy Buczynski to make arrangements to borrow the Society's lending telescope. The lending telescope can be borrowed by CCAS members for a month at a time; longer if no one else wants to borrow it after you. Kathy's phone number is 610-436-0821.



AL Observing Programs

One of the benefits of joining the CCAS is that you also become a member of the Astronomical League, a national federation of astronomy clubs. The AL has a series of Observing Awards, and four observing clubs based on these awards have been started in the CCAS. These are the Messier Club, the Binocular Messier Club, the Lunar Club, and the Double Star Club. Working on these awards also gives you a plan of observing: "What will I look at tonight?" becomes "Which Messier objects are visible tonight that I haven't seen yet?" Each club has a volunteer coordinator:

Messier Clubs (both): Frank Angelini (610-873-7929)

Lunar Club: Ed Lurcott (610-436-0387)

Double Star Club: Jim Anderson (610-380-4512)



CCAS Website

Pete LaFrance has set up a Web page for the Society on the World Wide Web (Internet). He has included some pictures taken by CCAS members. Check it out at:
http://members.tripod.com/~ccas_2/ccas.html

Pete welcomes any additions to the site by Society members. The contributions can be of any astronomy subject or object, or can be related to space exploration. The only requirement is that it is your own work; no copying copyrighted material! Give your contributions to Pete LaFrance (610-268-2616).



Join the Fight for Dark Skies!

You can help fight light pollution, conserve energy, and save the night sky for everyone to use and enjoy. Join the nonprofit International Dark-Sky Association (IDA) today. Individual memberships start at \$30.00 for one year. Send to:

International Dark-Sky Association

3545 N. Stewart
Tucson, AZ 85716



CCAS Membership Information

The present membership rates are as follows:

REGULAR MEMBER	\$20/year
SENIOR MEMBER	\$10/year
STUDENT MEMBER	\$ 5/year
JUNIOR MEMBER	\$ 5/year
FAMILY MEMBER	\$ 30/year

Membership Renewals

Check the date printed on the address label of this issue of *Observations*; "exp." appears in front of it, just after your name. If you are due to renew, you may send your renewal check made out to our Treasurer, Pete LaFrance. Mail to:

Pete LaFrance
413 Church Rd.
Avondale, PA 19311-9785

Sky & Telescope Magazine Group Rates

Subscriptions to this excellent periodical are available through the CCAS at a reduced price of **\$29.95 (note that this has just increased, as of October 1999)**, which is much less than the newsstand price of \$54.00, and also cheaper than individual subscriptions (\$39.95)! Make out a check to the Chester County Astronomical Society, note that it's for *Sky & Telescope*, and mail to Pete LaFrance. Or you can bring it to the next Society meeting and give it to Pete there. Buying a subscription this way also gets you a 10% discount on other Sky Publishing merchandise.

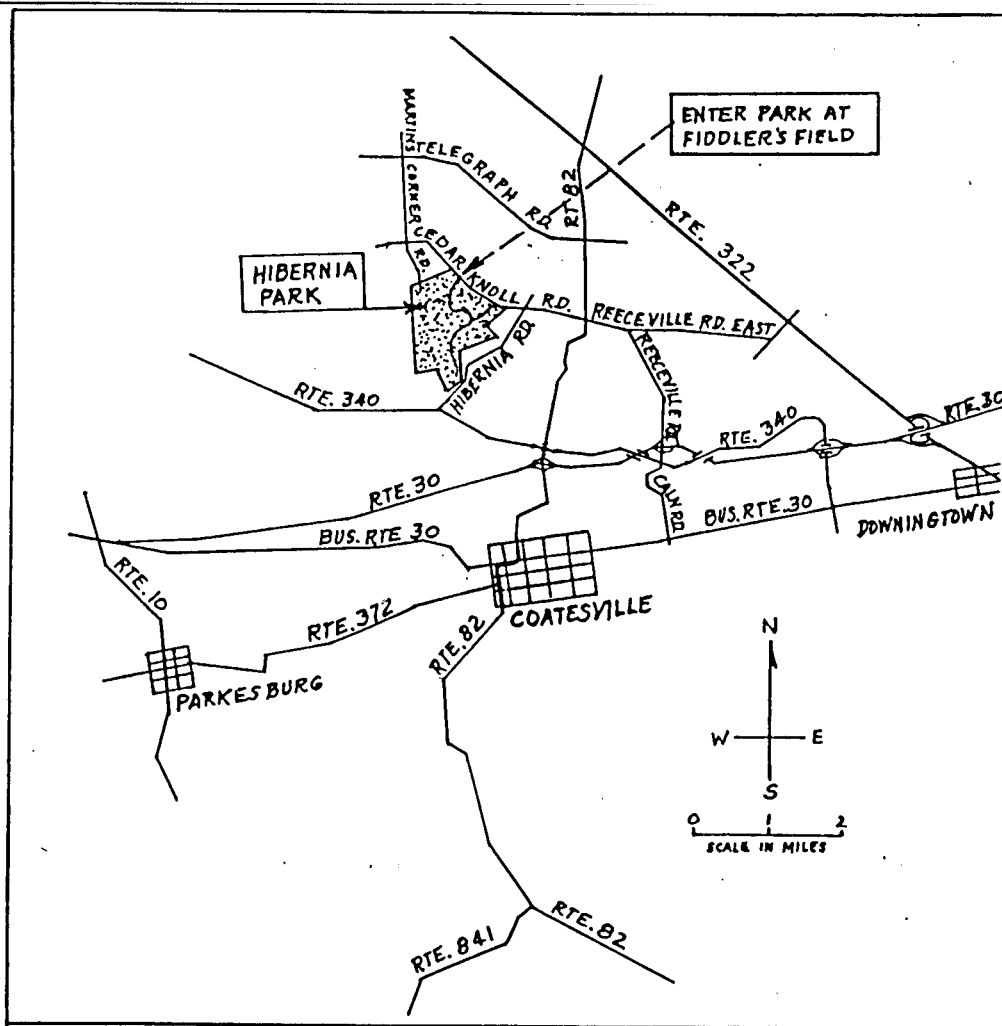
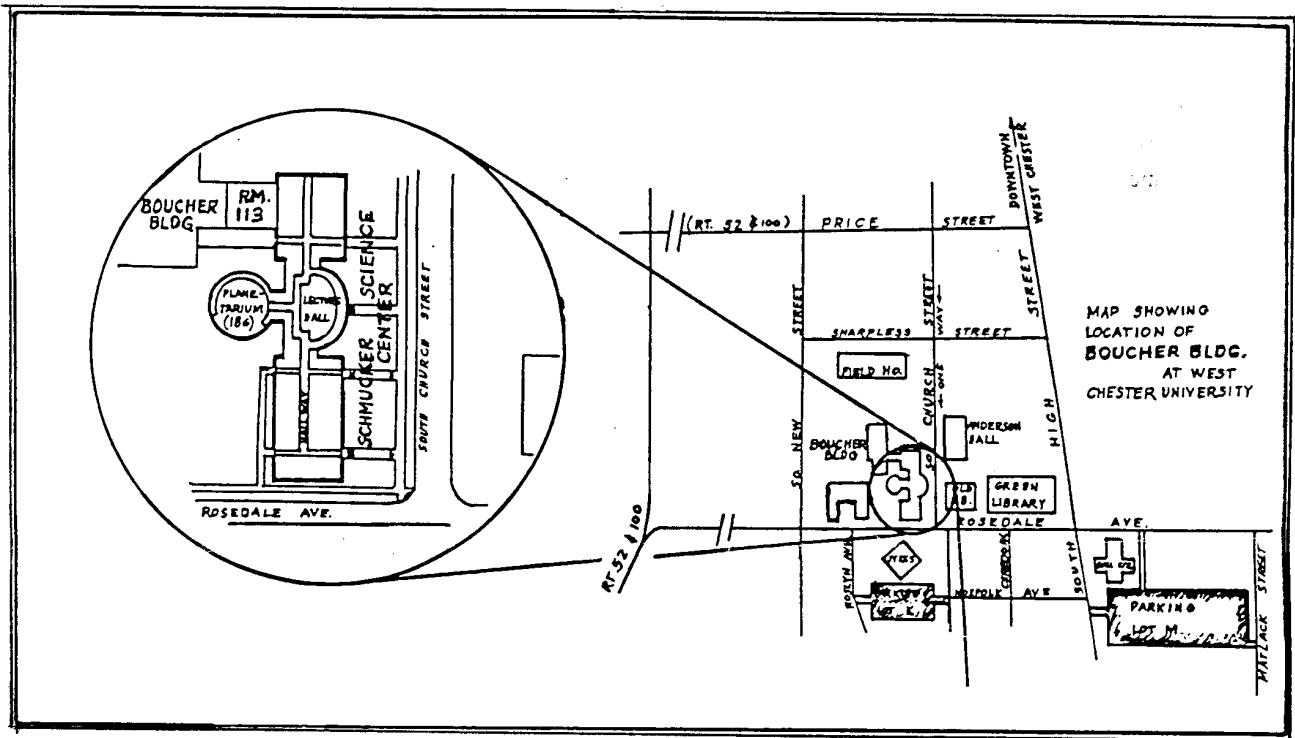


CCAS Officers

For further information on membership or society activities you may call:

President:	Mike Turco	(610) 399-3423
Vice Pres:	Steve Limeburner	(610) 353-3986
Treasurer:	Pete LaFrance	(610) 268-2616
Secretary:	Doug Liberati	(610) 827-2149
ALCor and Newsletter:	Jim Anderson	(610) 380-4512
Librarian:	William O'Hara	(610) 696-1422
Observing:	Ed Lurcott	(610) 436-0387





MAP SHOWING LOCATION OF THE
BRANDYWINE VALLEY ASSOCIATION

