

# A Brief History of the Twin City Amateur Astronomers

*Serving the Bloomington-Normal Community since 1960*

## Founding of the TCAA

John and Bertha Kieviet founded the Twin City Amateur Astronomers (TCAA) on February 4, 1960 in Normal, IL. John, an architectural draftsman, and Bertha, a homemaker, had just moved to town from Galesburg, IL, where they had actively participated in an astronomy club. Surprised by the lack of such a group in their new hometown,\* they established a group of “amateur moon watchers and star gazers” with assistance from the Normal Parks & Recreation Department. The membership adopted the name Twin City Amateur Astronomers at their next meeting on February 18<sup>th</sup>. Initial club meetings were held in the Fairview Park “cabana” during the winter and at various locations around town during the summer. The membership numbered about 30 that first year.



Bertha Kieviet  
1912-1994



John Kieviet  
1908-1981

## Years of Growth

At the outset, the TCAA membership was comprised of small telescope users and amateur telescope makers, as well as a number of armchair amateur astronomers. Commercially prepared telescopes of significant size were very expensive at that time, so members used 2.4-inch and 3-inch refractors, and 4<sup>1</sup>/<sub>4</sub>-inch reflectors. Within the first year of the club’s founding, Bob Mayo – a local machinist – helped John Kieviet construct a 6-inch reflector that served as an inspiration to other amateur telescope makers for years to come.

The membership started a tradition at that time that endures to this day – education of its own members and the general public. Membership meetings were held on the first and third Thursday evenings of each month, with a chalk talk or “movie with sound” being presented for the benefit of the membership and guests. Due to the limitations of available telescopes, viewing sessions consisted primarily of views of the moon, planets, and a few of the more easily located Messier objects. Private observations included meteor showers and variable stars. A high school member, David B. Williams, promoted observations of these. (David went on to become an editor of *Review of Popular Astronomy*, and ultimately would serve two terms as president of the American Association of Variable Star Observers from 2005-2007.) Just four years after its beginning, the TCAA established a relationship with the Illinois State University Physics Department when its new planetarium was opened on September 1, 1964. Dr. Ray Wilson, an astronomer from Illinois Wesleyan University in Bloomington, helped to bring the new planetarium to operational mode. He agreed to present a planetarium “show” to the TCAA membership that autumn and before long the TCAA started meeting regularly there as well as at the Mark Evans Observatory on the campus of Illinois Wesleyan. Members frequently used the 16-inch classical Cassegrain telescope located in the observatory after club meetings held there.

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\* The TCAA was not the first astronomy club in Bloomington-Normal. There was a short-lived club that operated from circa 1893-1914. This club, the Bloomington Astronomical Society, consisted of a close-knit group of personal friends of the Rev. H. O. Hoffman who brought this group together. The group operated an observatory with a small refractor at the rear of 612 N. Roosevelt in Bloomington. After Hoffman’s death in 1908, the club’s telescope and observatory was sold to the Bloomington Public Schools. In 1914 the telescope was removed to Edwards Grade School and the observatory removed.

During 1963-1964, the TCAA built a roll-off-roof observatory, named the *Beehive Observatory*, on the Fred Fissel farm just to the north-northeast of Normal. The structure was built using scrap wood from demolished chicken coops. A leader among the deconstruction/construction crew was Barry Beaman. (Barry would go on to serve as president of the Astronomical League from 1994-1998.)<sup>†</sup> With the encroachment of the newly built Interstate 55 roadway and the constant glow that emanated from the Twin Cities at night, the club's observers began to yearn for darker skies. Observations moved away from the club's observatory to public parks located in rural environs. By the mid 1970s, club members started viewing from a private observatory at Downs, IL that was erected by club member Bob Finnigan.

By the late 1970s, the club's public observing sessions were moved out of city parks to Moraine View State Park (15 miles east of Bloomington) and Comlara Park (6 miles north of Normal). Observing sessions were held for campers, and the general public was invited to attend. Presentations were illustrated with slides or filled with the antics of ISU Planetarium director and Native American storyteller Carl Wenning, and were followed by celestial viewing. Telescopes of up to 8-inches aperture were used to make observations. Only a few objects were viewed each night due to the usual problems associated with finding and tracking celestial wonders by hand. While clock drives were readily available to amateur astronomers at that time, it wasn't until the advent of "goto" telescopes that observing reached its highest form in the TCAA.

With the advent of better telescopes and mounts, members continued to earn their Messier Certificates using manual methods. At one point in the early 1980s, the membership held some 2% of all the Messier Certificates that had been awarded by the Astronomical League (AL) to that point in time. With the advent of "goto" telescopes and the availability of numerous AL observing clubs in the mid 1990s, visual observing expanded rapidly. Within a few years – and with a core group of only 5-8 active observers – the TCAAers earned memberships in AL observing clubs more than 50 times. TCAA activities became more expansive as well:

- In 1979, and several times thereafter, a TCAA member obtained on loan from NASA Plexiglas disks each containing six lunar samples retrieved by astronauts during the Apollo moon landings that took place from 1969-1972. These resulted in well-attended Astronomy Day displays at local shopping malls.
- Comet Halley observing constituted the TCAA's largest event ever. Some 3,000 people showed up at Comlara Park in February 1986 over the course of two nights to view this celestial interloper. A member-written booklet, *The Comet Halley Observing Guide*, proved to be very popular.
- In 1994, the TCAA promoted a member-written *Observer's Guide* prepared for the May 10<sup>th</sup> annular eclipse of the sun, and held several observing sessions simultaneously across central Illinois providing views of the sun and showing safe observing practices.
- Several times over the years small groups of members traveled the globe to observe total eclipses of the sun (Mexico, 1991; Bolivia, 1994; Venezuela, 1998; Mediterranean, 2006) and to see ancient astro-archaeological and other historical sites (United States, Mexico, Bolivia, Peru, Chile, India, Great Britain, etc.)
- The TCAA hosted the North Central Astronomical League (NCRAL) 2010 annual meeting in Bloomington with a theme of "The Past, Present, and Future of Astronomy".

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<sup>†</sup> Today, Barry's home observatory near Rockford, IL, bears the name "Praesepe" – another name for the Messier 44 Beehive Cluster – in honor of the TCAA's first observatory built not far from beehives maintained by Mr. Fissel.

During the life of the club, such luminaries as Dr. Harlow Shapley and David Levy have addressed the membership. Several TCAA members distinguished themselves in many different ways during the years as well – some even before the club was founded:

- **G. Weldon Schuette**, the TCAA's original *Outstanding Amateur Astronomer*, regularly made his own satellite predictions and observations as early as 1957. Within a short time he was asked by the Smithsonian Astrophysical Observatory to explain his approach. He described how he had created an analog computer consisting of a single transparent rotating disk affixed to a north polar azimuthal projection of Earth. Always an acute observer, Weldon was among the first of the world to identify the magnitude -0.2 Nova Puppis while standing reveille at Camp Blanding, FL, in 1942. He was the first TCAA member to welcome Halley's Comet during its latest apparition, and the last to bid it farewell. Weldon passed away unexpectedly in 1986 at 69 years of age.



G. Weldon Schuette (1985)



Carl Wenning with Aubrey Johnson (1986)

- **Aubrey Johnson**, born in 1897 and the oldest living TCAA member ever, became our one and only "Comet Halley Two-Timer" during February 1986. Always ready to describe how the 1910 comet's tail "swept clear across the sky" with the wave of an arm, he passed away in 1994 at 96 years of age.
- **Rebecca Wenning** was possibly the youngest female, if not the youngest observer ever, to earn the AL's provisional Messier certificate at 11 years of age on September 16, 1997.
- **Jean Memken** and **Mike Rogers**, editors of the TCAA's newsletter *The OBSERVER*, were recognized by the AL with the inaugural *Mable Sterns Award for Newsletter Excellence* in 1998.
- **Carl Wenning** received the *North Central Region Astronomical League Service Award* in 2007 in recognition of his contributions to amateur astronomy. In 2011 he was named Astronomical League Master Observer #109 after having completed ten AL observing programs.
- **Robert Arn**, founder of AstroArn Photography<sup>‡</sup>, has become well known for publication of astronomical photographs with several of his most outstanding works being featured in *Astronomy Picture of the Day*.

## The TCAA Today

Since its founding in 1960, the TCAA has changed significantly. We have reached our stride as a mature 501(c)(3) educational, non-profit organization. While plenty of attention is still paid to public outreach and the making of visual observations, astronomical imaging is beginning to dominate observing activities of our members.

In 2000, thanks largely to the efforts of club members Jim Baker, Dan Miller, Mike Rogers, John Werner, William Carney, and Duane Yockey, the TCAA constructed Sugar Grove Observatory on the property of Sugar Grove Nature Center located about five miles southwest of Shirley, IL. The observatory was capped with a 10-foot Ash Dome that was once part of Bob Finnigan's observatory at Downs, IL. A great variety of telescopes (two Celestron 14-inch SCTs, one Meade 12-inch SCT, a 130mm Takahashi

<sup>‡</sup> AstroArn Photography, <http://www.astroarn.com/home>

apochromatic refractor, a 250mm Takahashi reflector, a Celestron 11-inch Edge HD, and several smaller instrument) and mounts (LX200, CGE Pro, Paramount ME) have filled the dome since the new observatory's construction. With advances in astronomical cameras, the membership has also had access to a variety of such instruments (e.g., ST-10, QSI583C, ST11000, Apogee U16M). Putting this all together with appropriate computers and software (e.g., TheSKY, TPoint, Voyager, SkySafari, Cartes du Ceil, MaxIm DL, Photoshop, DeepSkyStacker) members have had, and continue to have, incredible access to the sky that a couple of decades ago professional astronomers could only dream about thanks to the efforts and contributions of Lee Green, Tony Cellini, Bob Finnigan, William Carney, Dan Miller, and John Werner. Recent results of members' efforts have been nothing less than spectacular.



*Sugar Grove Observatory*  
Copyright 2010 William Carney

During each of the past four observing seasons (2007-2011), the TCAA has averaged 43+ public outreach events each year, with members showing up to actively participate 211 times bringing telescopes 83 times. Our annual yearly average of patrons who attended our events is just under 1,500. The club is a member of the Astronomical League, and a participant in the NASA Night Sky Network. Lee Green serves as our NASA Solar System Ambassador. As such, he has taken the lead on many of the education and public outreach programs, and continues to provide educational services to our membership (along with Tony Cellini and Bob Finnigan) through one-on-one instruction under the dome of Sugar Grove Observatory.

The TCAA celebrated its 50<sup>th</sup> anniversary in 2010 during which time the club's historian, Carl Wenning, wrote a 139-page book *History of the Twin City Amateur Astronomers: 1960-2010*. This publication may be viewed online or downloaded as a fully formatted PDF from the club's web site – <http://tcaa.us/>. The basis of the club history was a long, nearly uninterrupted succession of club minutes and newsletters written by club members since the inception of the club and continuing to the present day. All available back issue of *The OBSERVER* newsletter can be found online at the TCAA web site.



Today the TCAA is primarily an observing club that provides educational and public outreach events. It holds no monthly meetings and very few social events. Among the latter are a February annual business meeting and a summer picnic. When not gathering informally at a restaurant, one or more active members can be found on almost any clear evening viewing at Sugar Grove Nature Center or imaging at Sugar Grove Observatory. The club's active observers number around a dozen today, though the number of armchair amateur astronomers comprising the rest of the club number hovers around 30. Their primary interest appears to be attending public viewing sessions held monthly in the dark of the moon from March through October, reading the club's monthly newsletter, learning astronomy online, and supporting the active membership with their dues.

C.J.W., Historian  
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