

*Recruiting & Retaining Astronomy Club
Membership*

TCAA Guide #11



NORTHERN LIGHTS

RECRUITING & RETAINING ASTRONOMY CLUB MEMBERSHIP

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ABOUT THIS GUIDE:

This *Recruiting & Retaining Astronomy Club Membership* guide is a compilation of numerous articles that appeared in the NCRAL ***Northern Lights*** newsletter from 2017 through mid 2024. The purpose of this Guide is to provide well thought out and detailed guidance for recruiting and retaining membership in an astronomy club, both the TCAA and the affiliates of the Astronomical League – the world’s largest group of amateur astronomers with a current membership of some 37,000 individuals.

The twelve articles contained herein were written primarily by the editor of this Guide, with two contributions by Devanand Chatrathi (TCAA) and Alan Sheidler (PAC). Each authors’ contributions are duly noted. The articles appearing in this Guide have been slightly edited from the original to correct grammatical errors and make stylistic changes. The original articles may be found in the various issues of the newsletter at <https://ncral.wordpress.com/newsletter-archive/> Each original article is hyperlinked via the season and year of issue.

ABOUT THE EDITOR:

Dr. Carl J. Wenning is a well-known Central Illinois astronomy educator. He started viewing the heavens with his grandfather in the summer of 1957. Since that time, he has continued viewing the night sky for more than six decades. He holds a B.S. degree in Astronomy from The Ohio State University, an M.A.T. degree in Planetarium Education from Michigan State University, and an Ed.D. degree in Curriculum & Instruction with a specialization in physics teaching from Illinois State University.

Dr. Wenning was planetarium director at Illinois State University from 1978 to 2001. From 1994-2008 he worked as a physics teacher educator. Retiring in 2008, he continued to teach physics and physics education courses for an additional fourteen years. He also taught astronomy and physics lab science almost continuously at Illinois Wesleyan University from 1982 to 2001. He fully retired from Illinois State University in 2022 after more than 40 years of university-level teaching.

Carl became associated with the TCAA in September 1978 – shortly after he was hired to work at Illinois State University. Today he is an Astronomical League Master Observer (having completed 14 observing programs to date), received the 2007 NCRAL Region Award for his contributions to amateur astronomy, and was presented with the Mabel Sterns Newsletter Editor Award by the Astronomical League in 2017. He is a lifelong honorary member of the TCAA and is a member of its G. Weldon Schuette Society of Outstanding Amateur Astronomers.

He served as Chair of the North Central Region of the Astronomical League (NCRAL) from 2017-2023. From 2016 to present he has served as editor of ***Northern Lights***, the NCRAL newsletter. Starting in 2023, he established and published on a monthly basis the ***NCRAL blotter***, a Regional update for affiliate presidents, ALCors, and newsletter editors.

A WORD ABOUT HOBBIES

~ by Carl Wenning, Twin City Amateur Astronomers ~

This article first appeared in NCRAL's *Northern Lights* Newsletter, [Spring 2017](#)

Editor's note: The following article is abstracted from Guide #3 – Astronomy as a Hobby – published online by the Twin City Amateur Astronomers (Bloomington-Normal, IL). It was written by *Northern Lights* editor and is provided here as an enticement to get NCRAL members to read the entire 9-page document. The document was written as part of an effort to “understand” why amateur astronomy is graying, and what we can do about it. The document may be downloaded in its entirety from <http://tcaa.us/TCAAGuides.aspx>.

The Benefits of a Hobby – In days of old, hobbies were often handed down from parents to their children. Today, most of us do not know or seem to have forgotten what it means to have a hobby. We are so engaged in television, social media, gaming, web browsing, and email that hobbies, as we once knew them, have pretty much disappeared.

It's not at all uncommon today to see families gathered around a restaurant table with each person working away on a cell phone or tablet. This lack of face-to-face communication comes at a price. Youngsters become socially isolated. They do not learn to engender and develop meaningful relationships with others. Engagement in hobbies that involve others is one way to break down this all-too-common problem. Involvement with hobbies helps the young to learn interpersonal skills necessary to navigate the adult world. Kids who are engaged deeply in hobbies – especially those involving parents and other adults – learn the social skills necessary to ride out the storms of life. They somehow always seem to become productive and socially responsible adults.

A hobby is an activity done regularly in one's leisure time for pleasure. Hobbies, if they are truly hobbies and not merely passing interests, are time consuming and can often require considerable expenditures. Still, the benefits of having a hobby are numerous:

- Hobbies provide a sense of leisure. They give us a chance to take a break from our humdrum daily existence. They provide a break with a purpose. They provide fun and fulfillment and can help one live life with a purpose.
- Hobbies provide a sense of passion. Passion goes hand in hand with happiness and satisfaction. Without a passion, any happiness is only temporary because there's nothing to make it last.

- Hobbies can be very motivational. They provide a positive type of stress that makes one feel excited about what one is doing and about life. They provide a sense of excitement and joy.
- Hobbies offer new challenges. These challenges break up one's day-to-day routine and are quite positive in as much as they allow one to challenge him or herself to become a better person – all that one can hope to be. They offer us new ways of seeing and experiencing the world.
- Hobbies unite you with others. Hobbies bring together those who have the same or at least similar interests. This helps to make life more fulfilling and keeps one's circle of friendships ever growing.
- Hobbies are great stress reducers. Adding things one doesn't want to do to a “to do” list is stressful. Adding things to such a list that one likes today can help alleviate day-to-day stressors by giving a break from them. When working on hobbies you have time to focus on things you like and this can be a great stress reducer.
- Hobbies provide health benefits. Engaging with hobbies is associated with better states of mind and help to lower levels of loneliness and depression. Experiencing enjoyable activities is associated with lower blood pressure and total cortisol. Hobbies are great for both mind and body.
- Hobbies assist with character development. When people interact with their peers, they learn social skills that tend to build one's character and sense of self-confidence. In addition, those with hobbies tend to have improved confidence and self-esteem.

The Benefits of Engaging Youth in a Hobby – What do parents who engage their children in hobbies know that others do not? It's that there are very substantial benefits of engaging youth in a hobby – not the least of which is growth in virtues. This oftentimes accounts for why certain children turn out to be successful adults whereas certain others are considerably less so. There are many cases in the history of the TCAA where engaged youth have gone on to lead highly successful lives thanks to the virtues they picked up by participating in this club.

William J. Bennett, in the preface to *A Book of Virtues*, notes, “Moral education – the training of the heart and mind toward good – involves many things. It involves rules and precepts –

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the dos and don'ts of life with others – as well as explicit instruction, exhortation, and training. Moral education must provide training in good habits. Aristotle wrote that good habits make all the difference.... Moral education must affirm the central importance of moral examples. It has been said that nothing is more important, more influential, more determining of a child's life than the moral power of quiet example. For children to take morality seriously, they must be in the presence of adults who take morality seriously, and with their own eyes they must see adults take that morality seriously.... This helps children to see what virtues look like in practice, how to recognize them, and how they work. The clear majority of Americans value honesty, compassion, courage, and perseverance. These are virtues, but because children are not born with the knowledge, they need to learn what virtues are.”

As a former homeschooling parent with a dozen years of experience, I can tell you how very important it is for children to interact with and be influenced by adults. Great benefits arise from doing so. While our two daughters did spend less time with other kids than “normal,” they did so because of spending more time with adults than “normal”. Over the years many non-homeschooling parents chided my wife and me for the “lack of socialization” that they perceived resulted from homeschooling. My typical response was, “We’re trying to raise adults here, not kids.” Think about this statement for a moment.

Kids won't learn moral virtues from those who don't yet possess them. It's much like the blind leading the blind; they both fall into the ditch. It's only when kids spend time with virtuous adults that they learn these virtues in addition to knowledge and skills. Our club membership provides many virtuous examples of commitment, dedication, loyalty, seriousness of purpose, generosity, altruism, self-control...

Children who spend time with adults can avoid a lot of the frivolity and negativity that often comes from spending time with their peers such as emotional abuse, mistrust, feelings of guilt and inferiority, role confusion, isolation, discrimination, despair...

In addition to growing in virtue, children who spend time with adults tend to personally mature much more quickly.

Interacting regularly with adults they learn to think like adults, speak like adults, and act like adults. They have no other choice. Lack of maturity is one of the main causes of children making poor decisions and getting into trouble with sometimes life-long consequences. The growth in personal maturity is one way to reduce if not altogether prevent such. Involvement with one or more parents in a hobby and an associated club are great ways to enhance the chances for success in life.

Now, I am not suggesting that youth should not socialize with other youth. There are many goods associated with doing so. For example, learning social and emotional coping skills, having the freedom to discover and explore personal interests, learning appropriate behavior by experiencing cause and effect in relationships, learning teamwork, having fun, and much more. Still, too much time with adults and too much time with children can be a terrible thing. Remember Aristotle's famous dictum, “virtue lay in the middle way” – a midpoint between extremes.

Because this club's leadership sees the importance of involving youth in amateur astronomy, it hosts or participates in family-friendly events throughout the year such as our public observing sessions, Family Science Day, and the Universe Sampler course. Also, during the February Annual Meeting the club often confers the Eugene and Donna Miller Family Award in recognition of parents (or grandparents) who have worked diligently with one or more of their (grand)children. This is done to shine light on the importance of engaging youth with the hobby of amateur astronomy via participation in the TCAA.

Perhaps if parents were more interested in raising adults than children, more of them would spend time with their children training them in the virtues – both directly by discussion and indirectly through example. Two ways of doing so are by engaging kids in a hobby and joining a club. These provide both an “excuse” and resources for parents to spend quality time with their kids.

Do you know any parents with children who might benefit by pursuing the hobby of amateur astronomy and being affiliated with our club? Ask them to join us.

THE RESULTS ARE IN: INVOLVEMENT WITH YOUR ASTRONOMY CLUB

~ by Carl J. Wenning, Twin City Amateur Astronomers~

This article first appeared in NCRAL's *Northern Lights* Newsletter, [Winter 2018](#)

Editor's note: This article is a slightly revised version of an article by the same name appearing in the July 2015 issue of *The OBSERVER* – the newsletter of the Twin City Amateur Astronomers. Though the results are from a survey among Illinois astronomy clubs, the results are probably typical of the Region.

Last month, I wrote an article about the importance of astronomy clubs, and expressed my concern that many dues-paying members are not involved to a great extent in the club. As I indicated in that article, this has been an ongoing concern of mine as well as of others in leadership positions. During the first two weeks of June (2015) I conducted an anonymous online survey among Illinois astronomy clubs attempting to determine the degree of and reasons for member involvement with these groups.

The present article addresses the results from all 58 individuals from different clubs who participated in the survey through June 15th. The results should be interpreted as being "in general" and not necessarily specific to any one group. There were 38 questions organized into eight groupings. The first group of questions dealt with demographics of those participating in the survey. Here were the results in bullet form:

- About 80% of respondents belong to only their local astronomy club, and about 20% belong to more than one club.
- About 85% of the respondents were male, 7% were female, 8% chose not to answer this question.
- About 65% of respondents work full or part time; 30% are non-working retirees, and 5% are students.
- More than $\frac{3}{4}$ of respondents hold individual memberships whereas just under $\frac{1}{4}$ are members along with a spouse and/or child(ren).
- The largest number of respondents came from members who were associated with their clubs 3-5 years and 11-20 years (about 25% each). Other periods (20 years) were about equally represented at about $\frac{1}{8}$ (13%) of their age group each.
- Just over $\frac{1}{2}$ of respondents owned a telescope as a youth, and just less than $\frac{1}{2}$ were not involved with amateur astronomy at all as a youth.
- Some 31% attended astronomy club meetings and events as youths; 26% were active amateur astronomers as

youths. When asked to what extent they have participated in club activities during the past year, the following degrees (number and percentage of respondents) were noted:

- I attended no club events 5 8.6%
- I attended 10% or less of club events 13 22.4%
- I attended 10-25% of club events 5 8.6%
- I attended 25-50% of club events 9 15.5%
- I attended 50-75% of club events 9 15.5%
- I attended more than 75% of club events 17 29.3%

The next group of questions examined the primary reasons for joining the club. There was a myriad of such reasons suggested. The survey showed that about 60% joined their club both "to learn about astronomy" and/or "develop friendships with likeminded people." About 50% indicated both "to gain access to club observatory/telescopes" and/or "to attend private club events." Other key reasons included getting assistance with observing or telescopes and participating in education/ public outreach activities.

When asked how people first heard about their local astronomy clubs, the reason was overwhelmingly "through a friend or acquaintance (86%). Distant seconds were "through a club website" (33%), and attendance at a public club event (24%).

The next group of questions asked about "desirable club activities," the answers solicited were mostly free response. The first question asked about the greatest benefit to belonging to the club. Key responses were interactions with other likeminded individuals, observing locations and equipment, and sharing knowledge/learning from others.

When asked in which club activities they most frequently participate in, the responses were meetings, public observing sessions, and education/public outreach. These answers were almost predictable because club members attend what clubs offer.

When asked about which types of activities they would like to see more, there were clear winners: "social events like pizza parties, informal dinners, member observing sessions, etc." (41%), "learn how to use club's observatory" (33%), "more advanced astronomy talks" (26%), and "in town observing sessions by day and by night" (24%).

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The next group of questions dealt with participation in their local astronomy clubs. When asked why they don't attend more functions than they do, the main response is that they are too busy with other activities (39%) most likely consisting of family or other social obligations (36%). Fortunately, only in 9% of the cases did respondents indicate that "personality conflicts" kept them from regular involvement in club functions. By far, 70% said that the best day for participating in club functions are on Saturdays. The locations of these events generated no unexpected trends.

The next group of questions dealt with becoming more involved in one's local astronomy club. Nearly $\frac{2}{3}$ (66%) indicated a desire to be more engaged in the activities of their clubs. When asked what it would take to get other members more involved in the current activities of their club, a whole gambit of responses was given showing no "silver bullet" for increasing this type of participation. Main ideas listed were "other" (39%), "more sky viewing sessions for members" (33%), "more social events so we can get to know one another" (29%), and "friendship/ camaraderie" (27%). To clarify the meaning of "other", we fortunately asked for an explanation using a free response format that generally indicated a desire for "more advanced" activities such as technical speakers, observing challenges, and less emphasis on astrophotography.

The next group of questions asked about what it would take to get others more involved, and there were some interesting responses. Comments included statements like more training sessions, better publicity, offer more social events, more members-only observing sessions, more basic talks, more actively engaging new members, and even having an events coordinator who would be responsible for organizing special activities regarding observation, socialization, and education. When focused on the question of increasing membership, there was a similarly extensive list of suggestions: increase astronomy content and decrease business content at meetings, use social media better, hold observing sessions in city parks, offer more child-friendly activities, arrange for better distribution of brochures, offer club-made educational resources for schools, and create club regalia.

Communications within the club constituted the next group of questions. The main avenues of communication are newsletters (93%), websites (85%), email lists (82%), and social media (42%). Blogs, online forums, and phone lists were hardly mentioned at all. 100% expressed interest in their club's communication media. 100% are interested their club's newsletter (when they club published one – not all do); 58%

were interested in their club's social media; 92% were interested in their club's website; and 93% were interested in their club's use of an email listserv.

By far the clubs' most effective outreach to members was through club emails (88% read them immediately upon receipt) and newsletters (77% read it immediately upon receipt). Other methods of communication such as social media (33% read it immediately) barely showed much response – likely perhaps because online forums, blogs, and phone lists are not used much.

One of the biggest aspects of communication within a club has to do with face-to-face communication. Here 83% said they were made to feel welcome when they first joined their clubs; 12% said they were not. When asked how we could best make new members welcome, the following suggestions in general were made: new member events, link new members with established mentors, create a welcome package, recognize them at the beginning of meetings, offer activities for beginners, have new members meet and greet the officers, place more emphasis on introductory visual observing, and assist new members with their observing equipment.

The next group of questions dealt with remaining a member of their club. When asked about staying with their primary astronomy club, 90% said they would; 91% said they would recommend their astronomy clubs to others. 76% expressed satisfaction with the club's observing location, and 68% with the club's equipment. 97% were satisfied with the amount they have to pay for dues. Only 52% are satisfied, however, with the amount of time and effort that they see most other members contribute to their club.

The concluding group of questions asked how to improve club involvement touching upon anything that this survey might have missed. The suggestions drew attention to the fact that more involved members wished that others would become more so. The main suggestion was to promote the use of social media, improve newsletter content by obtaining articles written by club members, raise the intellectual standards of talks intended for experienced amateurs, and several more – often club specific more heavily.

Lessons learned in general... Only about $\frac{1}{3}$ of each club's assumed 40 members completed the survey, and of these about half were less active – participating in less than half of all club functions – the very type of individual we most hoped would participate in the survey. Only about 1/6 of each club's

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less active members completed the survey. I cannot but conclude that these members who did not participate in the survey joined their club to support its efforts with their dues and might never be more actively engaged – no matter what changes take place within their club. Despite this, these individuals should know their support is greatly appreciated. Those who are engaged at one time or another with their local club have done so as a result of a personal invitation.

Websites, social media, advertising, and even adult education courses are far less effective in promoting club membership, though emails and newsletters play a key role. People who join our clubs do so initially to learn about astronomy and share it with likeminded people hopefully using club materials. Having participated in amateur astronomy as a youth was not a prerequisite for adult membership; only ½ of those currently involved in an astronomy club were active as observers in their youth. Several other main appeals of an astronomy club are access to telescopes and observatories, and outreach activities. Keep in mind that many prospective members are overwhelmed by the cost of large “goto” telescopes and photographic equipment.

If these are perceived as prerequisites for joining a club, few will be the number of new members. If these are seen as benefits of membership, then clubs who provide access to their members stand to benefit. Emphasis should be placed from time to time on simple equipment and approaches.

Clubs might even want to consider purchasing high quality, readily portable “goto” telescopes in the 8-inch aperture range. Once members have mastered these, then and only then will they be prepared to take the steps necessary to become advanced amateur astronomers. Clubs might be able to increase both their appeal and participation if they offer events geared toward the whole family from time to time. Of course, this does not preclude the inclusion of “advanced topics” every once in a while. One cautionary note, however, is not to invite the general public to events intended for the more experienced amateur astronomer. Talks that include elements of spherical astronomy, calculus, or complicated image processing procedures for instance could overwhelm novices and easily drive them away never to return.

Members want to be more involved with their club and others to be so too. Many members would like to have more club events including aspects of observation, education, and socialization. Clubs can do this by hosting observing events on Saturdays that include the whole family, providing classes for

members, and hosting more social activities such as dinners and club meetings (where they do not exist already).

At the same time club leadership must look to provide services for solitary or advanced members as well. A wider range of experienced members needs to be on the lookout to welcome and assist new members. Clubs should make a point of providing outreach to those who are unfamiliar with the night sky – a growing portion of our population. Efforts should be made to increasingly use social media and get the word out through other means in places where families gather such as in community parks, libraries, and community events. Daytime and nighttime “sidewalk” astronomy would also be another means to attract those with only a “passing” interest – literally. Extending personal invitations and handing out flyers at such time would be most appropriate.

While offering never-done-before activities in response to the findings of this survey, leaders need to keep in mind that the events have to be carefully coordinated with would-be attendees. You will recall from the survey that many members don’t participate as much as they’d like because they have schedule conflicts. I also have learned over the years that people will often suggest lots of great ideas; the problem with this is that when asked if they would participate in them either as teachers or students the response is more often than not “crickets.” We must ensure commitment from both ends of the expertise spectrum.

Electronic communications within the club are key to involving current members. Among the most important are email lists, newsletters, and social media. Websites need to be constantly improved and refreshed if they are to attract “repeat” visitors. Communications sent directly to the membership are generally read and responded to in relatively short order due to their brevity. Newsletters, being longer, are often put off for reading later due to their requirement for additional time.

Not to be understated, however, is the value of direct interpersonal communications. While promotion of our astronomy clubs through personal contact is critical to building a membership, it’s the face-to-face contact, helpful encouragement, and deepening friendships that keeps members in a club. Because so many schedule conflicts exist, it is important to get information out about events early, and to send reminders regularly. The appeal of an event must be clearly stated and of great interest if people are going to put it into their social calendar. Remember, the astronomy club isn’t the only game in town; it has to compete with other

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events. This can be when we realize that we often conduct our activities in remote locations. These might well attract only the more dedicated among our memberships.

Members who are involved in their clubs tend to continue their memberships when they clearly perceive the benefits.

The fact that our clubs have roughly equal number in the various age groups suggests that the current membership numbers are relatively stable. So, if members are satisfied with the status quo, then things need not change. If, however, members want their clubs and hobbies to grow, they must change what they are doing.

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NCRAL MEMBERSHIP SURVEY RESULTS

~ by Carl Wenning, NCRAL Chair ~

This article first appeared in NCRAL's *Northern Lights* Newsletter, [Spring 2018](#)

A total of 194 responses were received following the release of the Winter 2018 issue of *Northern Lights* and January 31st. Some 49% of all responses come from Illinois, 21% from Iowa, 12% from Minnesota, 16% from Wisconsin, and the remainder from the Upper Peninsula of Michigan. There were no responses from North and South Dakota. Demographics in relation to participation can be found following this article.

Let's get to the heart of the matter by reviewing the questions and the responses. I'll provide a small amount of commentary following each set of responses by way of interpretation. Responses are indicated by raw numbers (followed by percentage of all respondents who answered this question). Some responses have been rank-ordered from highest to lowest.

QUESTION: Please check what you feel is the most important reason for your PRIMARY CLUB to be affiliated with the AL." The responses were as follows:

- To obtain the League's newsletter – **Reflector**: 85 (43.6%)
- To take advantage of the League's observing award programs: 73 (37.4%)
- To financially support the efforts of the League: 52 (26.7%)
- To attend Regional meetings – NCRAL 32: (16.4%)
- To attend League conferences – ALCon: 29 (14.9%)
- To get reduced rates for astronomy-related publications: 22 (11.3%)

COMMENTARY: This is important information if ever we expected to grow the number of the Region's groups that affiliate with the Astronomical League. I suspect that more clubs would affiliate with AL if members knew of these benefits. One thing that surprises me though is that the AL posts its copies of **Reflector** online for free download at about the same time that they are printed. This seems to negate the main reason for a club to affiliate with the AL and, by extension, NCRAL.

QUESTION: What benefits do you most appreciate as a member of the Astronomical League?

- Reflector** newsletter: 142 (73.2%)
- Observing programs: 116 (59.8%)
- Nation (ALCon) meetings: 28 (14.4%)

- National awards (Peltier, Mabel Sterns, Young Astronomer, etc.): 24 (12.4%)
- Facebook & other social networking: 17 (8.8%)

COMMENTARY: The responses to this question mirror the responses from the prior question. The big three things in favor of AL membership are its newsletter, observing programs, and national meetings.

QUESTION: What do you PERSONALLY consider the greatest benefit of this membership in the Astronomical League?

The most common responses were the following: observing programs, networking with others and sharing of ideas, newsletters, contact with nearby clubs, learning about astronomy, credibility, lending support, sense of community, increased knowledge, and observing skills, yet a considerable number indicated in one form or another, "I see no benefit at all."

COMMENTARY: Personal reasons for belonging to AL are pretty much the same as the reasons for a club to belong to AL. This is as it would be expected because memberships that vote to join the AL typically do so for individualized reasons, not the good of the group generally speaking. It's unfortunate that not a small number of people voiced "I see no benefit at all." This is part stems from the fact that many who responded to the survey indicated that they are relative newbies as far as astronomy goes. This suggests that we should make our memberships aware of the benefits of belonging to AL and NCRAL by default.

QUESTION: NCRAL has a considerable amount of funds in its treasury. How would you like to see at least some of this money spent?

- Provide resources for increasing and maintaining memberships: 90 (47.6%)
- Reduce registration costs of NCRAL meetings: 37 (19.6%)
- Small grants for state-level meetings: 36 (19%)
- NCRAL website (bylaws, affiliates, awards, etc.): 27 (14.3%)
- Create and support additional Region awards: 16 (8.5%)

COMMENTARY: We have all heard too many times that the hobby of amateur astronomy is graying. Also, we know that

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many are those who join a club and then never show up for events. (We need to realize that some just want to support us in our efforts of promoting astronomy to the general public.) This suggests that we should provide a rationale for joining in amateur astronomy and provide guidance as to what it means to have a hobby. Efforts have been made in this area already; check out the TCAA Guides that can well be modified for NCRAL as a benefit of membership. You can review all seven guides at the following URL: <http://tcaa.us/TCAAGuides.aspx>

QUESTION: How might NCRAL benefits be improved for club and individual membership?

- Speakers' bureau: 99 (53.2%)
- Guides for recruiting members: 81 (43.5%)
- Web page development and maintenance resources: 80 (43%)
- Officer guides to operating clubs: 59 (31.7%)

COMMENTARY: The idea of a speakers' bureau of sorts was broached in an earlier issue of *Northern Lights*. It has been suggested that the Region's officers be provided with a limited and clearly defined level of support from our treasury should they wish to participate in this type of activity. This idea appears to have been met with a certain degree of interest by club officers who I have contacted. This topic be included in the agenda of the upcoming business meetings at NCRAL 2018.

QUESTION: How important do you feel it is for the NCRAL leadership to develop and make use of an unofficial advisory group employing electronic means (of communication)?

- Very important: 30 (15.5%)
- Somewhat important: 52 (26.8%)
- Neutral: 82 (42.3%)
- Somewhat unimportant: 16 (8.2%)
- Not important: 14 (7.2%)

COMMENTARY: There is no clear trend in this area. The weighted mean is 2.65 (where 2 means somewhat important and 3 neutral). By in large, those surveyed aren't particularly interested in seeing the development of an unofficial advisory group. This idea will therefore no longer be pursued. Nonetheless, affiliate presidents, ALCors, and newsletter editors will be kept in the loop with regard to important questions and developments within the Region.

QUESTION: How important do you feel it is for the NCRAL leadership to increase the use of social media to reduce the

"isolation" that members-at-large and even some clubs and club members certainly must feel?

- Very important: 49 (25.3%)
- Somewhat important: 70 (36.1%)
- Neutral: 39 (20.1%)
- Somewhat unimportant: 28 (14.4%)
- Not important: 8 (4.1%)

COMMENTARY: It has been pointed out by at least one respondent that this is a biased question due to the phrase "club members certainly must feel." Be that as it may, we can probably still learn something from the question – at least in general. The weighted mean of this response is 2.36 where 2.00 means somewhat important and 3.00 means neutral. Perhaps this number wasn't terribly high as some were already familiar with Facebook. There was at least one request to develop a Twitter account. Still, over 50% believe that this is somewhat to very important. Increasing awareness about and activity level of our Facebook page might be the first step.

QUESTION: How important do you feel it is for the NCRAL leadership to increase the content of the NCRAL website?

- Very important: 40 (20.6%)
- Somewhat important: 65 (33.5%)
- Neutral: 65 (33.5%)
- Somewhat unimportant: 17 (8.8%)
- Not important: 7 (3.6%)

COMMENTARY: There is again some convergence in the question. The weighted mean is 2.41 with more than 50% of respondents feeling that improvement of the content of the NCRAL website is somewhat to very important. It seems clear given some of the other responses in this survey, that we certainly should improve the offerings of NCRAL by increasing the amount of desired content. The real problem is getting members to contribute. Please be aware that the NCRAL leadership will gladly entertain requests for and offerings of content for the NCRAL website.

QUESTION: How important do you feel it is for the NCRAL leadership to promote attendance at our annual spring Region meeting?

- Very important 42: (21.6%)
- Somewhat important: 74 (38.1%)
- Neutral: 59 (30.4%)
- Somewhat unimportant 11: (5.7%)

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Not important: 8 (4.1%)

COMMENTARY: Again, not a strong convergence on this question with a weighted mean 2.32. Nonetheless, nearly 60% feel that promoting attendance should be one of the duties of the leadership. Promoting Regional meetings is being done primarily with the use of the **Northern Lights** newsletter. NCRAL meetings in 2017 and 2018 were regularly promoted via Facebook and the newsletter. This will continue unabated so long as conference hosts are willing to forward information to the newsletter editor.

QUESTION: How important do you feel it is for the NCRAL editors to strengthen the scope and increase the length of the **Northern Lights** newsletter?

Very important: 24 (12.4%)
Somewhat important: 77 (39.7%)
Neutral: 65 (33.5%)
Somewhat unimportant: 15 (7.7%)
Not important: 13 (6.7%)

COMMENTARY: The weighted mean of this question is 2.57. This suggests that the membership is fairly happy with the scope and length of the **Northern Lights** newsletter. It probably still could benefit from a greater number and variety of articles which the editors and several authors have tried to provide. We will continue with the newsletter as usual, reiterating now and then that we need members to contribute if they want to see the newsletter improve.

QUESTION: How important do you feel it is for the NCRAL leadership to promote observing using the Astronomical League observing programs as a corridor?

Very important: 70 (36.1%)
Somewhat important: 61 (31.4%)
Neutral: 41 (21.1%)
Somewhat unimportant: 20 (10.3%)
Not important: 2 (1%)

COMMENTARY: Of all the survey's questions, this is one of a few that seemed to generate the greatest sense of importance. It had a weighted mean 2.09 which means, by in large, a full 2/3 of those surveyed considered it to be at least somewhat important that the leadership promote observing. An informal "hands up" survey at NCRAL 2017 showed that a surprisingly large percentage of those in attendance had never completed an AL observing program. Perhaps this is a call to all those master observers out there (there were 8 in

attendance at NCRAL 2017 if my memory serves me correctly) to spend some time writing about their observing pursuits – the whys, hows, whens, and so forth.

QUESTION: How important do you feel it is for the NCRAL leadership to encourage participation at state-level star parties?

Very important: 57 (29.4%)
Somewhat important: 66 (34%)
Neutral: 52 (26.8%)
Somewhat unimportant: 11 (5.7%)
Not important: 8 (4.1%)

COMMENTARY: This question has a weighted mean 2.21, with over 2/3 of those surveyed believe that this is a reasonable expectation of the NCRAL leadership. Promotions will appear if and only if the NCRAL leadership is made aware of these events, and suitable information is provided. Any information sent to the NCRAL chair has been posted in the **Northern Lights** newsletter, on the Facebook page, and on the NCRAL website. (We have a page dedicated to just this topic; see the following: <https://ncral.wordpress.com/events/>) By special request, the chair also will send this information to presidents, ALCors, and newsletter editors. Getting the word out about statewide star parties starts with the hosts.

QUESTION: How important do you feel it is for the NCRAL leadership to conduct surveys to get a sense of what Region members like, want, and will agree to?

Very important 58 (29.9%)
Somewhat important 69 (35.6%)
Neutral 46 (23.7%)
Somewhat unimportant 12 (6.2%)
Not important 9 (4.6%)

COMMENTARY: With a weighted mean of 2.20, nearly 2/3 of those surveyed believe that conducting surveys to get a sense of membership desires is a good idea. It was the sense of the Regional Chair that this would be a good idea. This is reflected in the fact that 194 completed our survey and see this as a meaningful way to gather information about wants and needs. This survey has done specifically what the membership desires.

QUESTION: How regularly are you receiving NCRAL's quarterly newsletter – **Northern Lights** – through your club's president, ALCor, or newsletter editor?

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Very regularly: 92 (47.7%)
Somewhat regularly: 30 (15.5%)
Sometimes: 19 (9.8%)
Rarely: 18 (9.3%)
Never: 34 (17.6%)

COMMENTARY: We've made a good start with getting the **Northern Lights** newsletter up and running, and it has been going for near two years now. We have produced 8 quarterly issues since Summer 2016. Co-editor Jim Gibbs and I have done our best to send out quality issues to club presidents, ALCors, and newsletter editors. Unfortunately, sometimes the newsletter doesn't get beyond these points of contact. How else can we explain the fact that less than half of our membership gets the newsletter very regularly? NCRAL members should be aware that the newsletter is released with the start of each season. Back issue can be found on the NCRAL website.

QUESTION: How aware are you that NCRAL has a website at the follow URL: <https://ncral.wordpress.com/>

Very aware 23 (11.8%)
Somewhat aware: 22 (11.3%)
Slightly aware: 32 (16.4%)
Vaguely aware: 33 (16.9%)
Not aware at all: 85 (43.1%)

COMMENTARY: More than half of those responding (60%) were vaguely or completely unaware that NCRAL has a website. This is surprising due to the fact that each issue of **Northern Lights** for the past two years has had a piece dealing with the NCRAL website. I can only hope that, as a result of this survey, members are now more aware of the fact that we do have a website and have visited it at least once. I commend webmaster Jeff Setzer for his willingness to update the website according to my wishes as Regional Chair.

QUESTION: How aware are you that NCRAL has a Facebook page at <https://www.facebook.com/northcentralregionastronomicalleague/>

Very aware 9 (4.6%)
Somewhat aware: 9 (4.6%)
Slightly aware: 32 (16.4%)
Vaguely aware: 31 (15.9%)
Not aware at all 114 (58.5%)

COMMENTARY: Over 90% of those surveyed were slightly aware or less that NCRAL maintains a Facebook page. This can be due to a number of reasons, not the least of which is that not everyone participates in Facebook. Still, each issue of **Northern Lights** for the past two years has had a piece dealing with the fact that we have a Facebook page. I can only hope that, as a result of this survey, members are now cognizant of the fact and would consider "liking" us so they can follow our feed. Perhaps we read the newsletter on the run but should come back for a second look when we have more time to reflect upon what it says.

QUESTION: What activities do you wish NCRAL would offer that it currently does not offer?

- Rotating NCRAL star parties
- Use something like twitter to alert of astronomical events
- A program like *StarGazer* to get people looking up
- Webinar type of outreach/speakers on the go
- Promote networking
- An NCRAL brochure explaining what we are all about

COMMENTARY: Many thoughtful comments were provided, but the above six were the most feasible in my estimation. It would be interesting to see a "rotating" NCRAL star party, but unless each was a major event, they would not likely have a long-distance appeal. I, for instance, probably would not drive to a distant location to observe pretty much the same sky I could see from home unless there were some compelling reason for me to attend. Also, many states already have star parties. A visit to the NCRAL website will show the regional parties this past year. States without such star parties might want to host one. We already have Facebook and "a program like *StarGazer*" might be feasible. The only problem with these is that it takes dedicated individuals who are willing to spend the time writing and/or producing regular offerings. If you are willing to do so, please contact me.

Most other comments were very club specific – things offered on the local level that NCRAL would not likely participate in as an organization. I indicated earlier in the **Northern Lights**, we should consider making it possible for our officers (as an option, not a mandate) to present to individual clubs. This might best be done using electronic means rather than actually travel to distant locations which would occur with considerable cost of time and effort. Networking will only increase if people try to do so. In the Twin City Amateur Astronomers, we've been hosting a "mini conference" for our nearby clubs over the past few years, and only last week a joint meeting with the Sangamon Astronomical Society

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(Springfield, IL). I encourage other groups to consider doing the same or similar things. The idea of an NCRAL brochure is a good one. It would help us focus on the benefits of membership in the AL as well as NCRAL. To the best of my knowledge even the AL itself does not have such a club-level/member-at-large brochure.

A few of the other suggestions really require some sort of detailed response because it's clear that hearts and minds were doing some serious work here. As a result, I've chosen a limited selection of these and provide a brief response for each as follows:

- *introduction to radio astronomy course* – Offering a course for members spanning several states certainly would be a challenge. One of the ways this might be done would be through live broadcasting or YouTube. The topic, obviously, would have to be addressed by someone who is reasonably expert in this area. I am not familiar with any such persons. Keep in mind that the AL now has radio observing program. I refer our readers to the AL webpage for all observing programs: <https://www.astroleague.org/observing.html>
- *help with lighting ordinances* – No one does a better job with this than the International Dark-Sky Association (IDA). No need to even try to duplicate outstanding efforts and accomplishments in my opinion. Check out IDA at <http://www.darksky.org/>
- *beginner programs* – Several recent issues of **Northern Lights** have highlighted offerings for recruitment and retention, including a booklet providing a detailed course for beginners. If you have overlooked these free booklets, then visit <http://tcaa.us/TCAAGuides.aspx>
- *lower cost for NCRAL* – I'm not quite sure how to interpret this comment. There is no charge for membership in NCRAL. AL membership confers free membership in the North Central Region. The Region receives no money whatsoever from the national office. All NCRAL income derives from Regional meetings. All officers and appointed persons are entirely volunteer and receive no stipend. Now, if the reference is in relation to NCRAL regional meetings, then this is something to consider. Data from this survey indicated, however, that only 19.6% of those survey indicated that reduce registration costs of NCRAL meetings was of importance.
- *paper copies of newsletter* – While this appears on the face of it to be a good idea, we must consider the implications. **Northern Lights** is currently available as a high-resolution color PDF. Going to a printed copy would require black and white prints of considerably lower quality due to cost. Printing costs would be very substantial and would require payments from each club. Right now, the publication is free and has no size limit. Dissemination over email is also fast and free. The cost of postage, the cost of time and effort for the editors, the headaches associated with trying to maintain a database of everyone who is to receive the printed publication, and such just aren't worth it when a PDF version is available either from your club's president, ALCor, newsletter editor, the NCRAL Facebook page, or NCRAL website.
- *interfacing with universities, planetariums, observatories* – Many clubs already operate in conjunction with these facilities. It is incumbent upon each organization to develop and cultivate their own local relationships. This is not something that can be done on a regional level.

In summary – First and foremost, I wish to express my thanks to all of those who took the time out to complete this survey. I also thank presidents, ALCors, and newsletter editors for getting the word out to their memberships about this survey. Second, the results of this survey bode well for the Region. We now have some good ideas with which to work as we chart the future of the Region.

So, where do we go from here? Starting with the next issue of **Northern Lights**, I'm going to make an effort to provide resources and draw attention to those that already exist; I encourage others to join me in doing so. The concerns of the Region have been the concerns of my club also. We have worked diligently over the past few years to increase resources for our members and what we have produced can be found online. Look for basic information about these resources in articles later in this issue, and in future issues.

Lastly, I remind the membership that it is nice to talk about such things, but that we all must pitch in to help if we expect anything significant to happen. I often refer to this bit of advice, "Many hands make for a lighter load."

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SURVEY PARTICIPANT DEMOGRAPHICS

Illinois had the most diverse representation among the clubs of its state. 26% (22) of the Illinois responses came from the Northwest Suburban Astronomers; 17% (15) came from the Champaign-Urbana Astronomical Society, 13% (11) came from the Twin City Amateur Astronomers; 12% (10) came from the Rockford Amateur Astronomers, 9% (8) came from the Skokie Valley Amateur Astronomers, and 9% (8) came from Popular Astronomy Club. Four other clubs contributed in smaller percentages: Peoria Astronomical Society, Sangamon Astronomical Society, Naperville Astronomical Association, and Chicago Astronomical Society. There were also two members-at-large who contributed to the survey.

Iowa had five clubs participate in the survey. 57% (20) of the Iowa responses were from the Cedar Amateur Astronomers, 26% (9) were from the Des Moines Astronomical Society, and 9% (3) were from the Ames Area Amateur Astronomers. Also contributing were members from the Black Hawk Astronomy Club, and one club not affiliated with the AL/NCRAL.

100% of the **Michigan** responses (2) came from the Marquette Astronomical Society.

96% of the **Minnesota** responses (21) came from the Minnesota Astronomical Society and one other club.

There were no respondents from either **North Dakota** or **South Dakota**.

Wisconsin, like Illinois, had a widely diverse number of clubs participating in the survey. 32% (9) of the Wisconsin responses came from the Neville Public Museum Astronomical Society; 21% (6) came from the Sheboygan Astronomical Society; 14% (4) came from the Door Peninsula Astronomical Society, 11% (3) came from the La Crosse Area Astronomical Society, 11% (3) came from the Milwaukee Astronomical Society. Three other clubs had members who also participated: Wehr Astronomical Society, Racine Astronomical Society, and Iowa County Astronomers.

THOUGHTS ON MAKING AMATEUR ASTRONOMY THRIVE

~ by Carl Wenning, NCRAL Chair (2017-2021) ~

This article first appeared in NCRAL's *Northern Lights* Newsletter, [Winter 2020](#)

I have heard it said more than once that amateur astronomy is “graying” and I’m sure that you have too. Just look around your club at the next gathering and note the average age. It’s probably up there and likely getting higher with the passage of time. If you want to know what your club will look like in 20 years if current recruitment and retention practices don’t change, then just add 20 years to everyone’s age in the club and do a recount. By this measure, amateur astronomy is not only graying – in some ways it is dying.

While the recent success of the Twin City Amateur Astronomers (TCAA) in recruiting new members with the support of the first NCRAL membership recruitment mini-grant is indeed impressive, it is important to realize that membership recruitment and retention are two sides of the same coin. We can’t have one without the other if our clubs are to survive or, better still, thrive. Getting new members doesn’t count for much if current members disappear as quickly as new members appear. When this happens, a club will not grow.

Putting it another way, club membership is like a leaky bucket. While new members might flow into the bucket like a stream of water, the level of the water in the bucket will not rise if it continues to leak water at the same rate that it acquires it. Only when the water flowing in exceeds the water flowing out will the level of the water in the bucket rise.



I’ve recently been thinking about this other side of the membership coin – retention. I’m concerned about retention of both new and established rank and file astronomy club members, including the leadership. Getting older and having been involved in several astronomy clubs over the course of my adult life, there are a number of reflections I have had as a leader that I want to share.

Before I start, it’s critically important to note that we must clearly identify a problem before functional solutions can be worked out. Unless a problem is properly identified, no workable solution is possible.

Experience has shown that most clubs have an active core of 20-25% of the membership who are dedicated to amateur astronomy and need little to no additional support to keep them involved with a club. These rank and file members are the backbone of any club, and all successful clubs seem to have them. New members must be treated differently, however, and here are a few suggestions:

- Find out what enticed these new members to join and then do more of it. When what attracted a new member is no longer available, disillusionment soon follows, and departure occurs shortly thereafter.
- Point out from time to time, the wide variety of benefits that membership in your club provides. Consider developing an informational guide such as the TCAA Guide #2 – Membership & Benefits.
- Work to keep new members engaged. When they show up at your meetings, be certain to greet them, acknowledge their presence, shine some limelight on them, and engage them in discussions about their interests and needs. Make this a personal goal and don’t count on others to do so as they are often too engaged with those they already know.
- Get new members involved in club activities and sustain their participation. Get them involved by encouraging their use of club or personal equipment. Keep in mind that amateur astronomy really is a type of mentorship because today the learning curve can be both steep and confusing (to say nothing about the cost of quality equipment), and many don’t make the transition from new to rank and file membership without some form of regular assistance from established members.
- Identify who is not engaging and try to win them back by personally inviting them to participate in club events. Don’t wait! The longer they are away from the club, the harder it will be to bring them back.
- Diversify and increase the frequency of your club’s events. Different events appeal to different people, so be sure to hold a wide variety of member education and public outreach events. Public and “members only” observing sessions, club socials, mini courses, talks, lab activities, and workshops will lead to retained memberships.

The “transition” experience of passing from new member to “rank and file” can be a long one. Unless this transition is

made, clubs will likely lose their new members. See the article in the September 2019 issue of Reflector by Chuck Allen for many other ideas about making this transition successful.

My experience over the years also has shown that keeping club leadership is just as important as keeping new members. Why is it that some clubs tend to lose leaders after their terms of office expire? It's a common occurrence, and we've probably all seen this happen.

I could list a considerable variety of reasons why leaders sometimes quit, but I'll forego that here. Suffice it to say leaders often leave a club because they too often perceive that their work goes either unnoticed or is underappreciated if it is noted at all. This leads to disappointment and finally, disillusionment.

What can rank and file members do to change some of our leadership's perception of being underappreciated? What follows are a few pointers based on my many years of experience as a club leader and North Central Region Chair:

- When a leader calls for nominations for the next club election, seriously consider serving. If you don't, the existing officeholders might "coerced" into serving yet another term.
- When a leader asks for an opinion, give yours clearly, concisely, and with all honesty, too many leaders have learned the hard way that what members call "a good idea" is not necessarily one that members will support.
- When a leader calls for a volunteer, be sure to respond to the call for action. Taking the lead on particular activities is a wonderful way to assist club leaders.
- When a leader creates a Facebook or web page or email list, do take advantage of it from time to time and leave a comment, or at least give some sort of

acknowledgement indicating that you have visited. Otherwise, it's like no one is paying attention.

- When a leader arranges a club activity such as a social or observing program, do your best to attend.
- When a leader has obtained your promise to accomplish a particular task, don't let month after month go by with that promise going unfulfilled.
- When a leader has gone out of his or her way to do a job or provide a particular service, be certain to thank or otherwise acknowledge the leader's efforts.
- When a club secretary sends out minutes for review, please review what has been written and get back to the secretary with any errors or omissions, or at least acknowledge the review process even if you have nothing to add or change.
- When a club editor puts out a monthly newsletter, be certain you read it, doing it more than once if possible. It can take an editor many hours over the course of a month to put together an issue and only a few minutes for members to read it.
- When a club editor requests input from the membership, be sure to contribute something even if it is small such as a picture or a news note.

Are these sound bits of advice? I certainly believe so! When leaders within a club experience anything less, they often become frustrated. Eventually, this frustration turns to disappointment and later into disillusionment. Before long, the exit seems pretty inviting, and all too often, leaders depart a club forever. This shouldn't be happening, and it won't happen if our club's leaders received encouragement, support, and recognition due them for their service to a club.

Remember what English parliamentarian Edmund Burke once said, "The only thing necessary for the triumph of evil is for good men to do nothing." That too, is sage advice in relation to astronomy clubs.

WHAT DO NEW MEMBERS WANT FROM AN ASTRONOMY CLUB?

~ Devanand Chatrathi, Twin City Amateur Astronomers ~

This article first appeared in NCRAL's *Northern Lights* Newsletter, [Winter 2020](#)

I recently participated in the Twin City Amateur Astronomer's Introduction to Amateur Astronomy course. Carl Wenning, the lead instructor, asked me to come up with a list of suggestions telling him what new members want. I had discussions with course members and conducted an online survey. Below are some suggestions that might capture the interest of newcomers and translate that interest to active engagement. Astronomy clubs and their members might want to implement as many of the following suggestions as possible:

- Conduct amateur astronomy programs to spread awareness on the subject. The program to be scheduled around a spring timeframe so that the members can take advantage of the summertime to attend observing sessions organized by the club.
- Present hands-on, minds-on activities dealing with specific topics that are suitable for both adults and families with children. (These would include lab activities, paper-and-pencil worksheets, and skywatching activities such as lunar-planetary gatherings or appearances of the International Space Station)
- Engage new members in the club's public viewing sessions and also plan for viewing sessions where members can form groups and discuss their thoughts and ideas on the subject, thereby engaging and involving in the subject.
- Conduct a couple of small group observing sessions with eyes and binoculars out under the stars at the initial stages so that the members can start getting acquainted with the sky and locate the basic stars, planets, galaxies, constellations, etc.
- Offer individualized or small-group training sessions using an observer-friendly telescope (altazimuth mounted "goto" telescope).
- Have members in the club give a session or two about parts of the telescope, diverse types of mounts, etc. on a practical basis to make members feel comfortable using a telescope.
- Greet new members at meetings and social gatherings, making them feel welcome.
- Encourage involvement in education (for club members) and public outreach (for nonclub members).
- Encourage new members to enroll in the group's email list to keep them aware of club activities and share updates about new activities planned.
- Create a platform for members to give short talks about topics of interest.
- Communicate with new members regularly, constantly encouraging them and inviting them to be involved.
- Plan for a local planetarium visit and engage new members in a discussion about what they have experienced.
- Organize a quarterly meet up with new members and provide a forum for active discussion on future events.
- Circulate a club newsletter on a monthly basis to all the members who have subscribed to the group email list.
- Provide family observing sessions where everyone in the family can participate and share a unique learning experience and continue engaging the kids to collaborate more.

It is my belief that providing these types of services to new members certainly should help at least some of them make the transition from want-to-be amateur astronomers to the real thing.

THE JOYS OF AMATEUR ASTRONOMY

~ by Carl J. Wenning, NCRAL Chair (2017-2021)

This article first appeared in NCRAL's *Northern Lights* Newsletter, [Summer 2020](#)

The joys of amateur astronomy can be described readily with five words: knowing, observing, experiencing, sharing, and serving. Most knowledgeable, experienced, and dedicated amateur astronomers have benefited from most if not all of these joys. As an Astronomical League Master Observer with a broad base of experiences, I am one of those individuals. I feel duty-bound to share what my 60+ years as an amateur astronomer have revealed to me so that others can experience the same delights that I have known. This article provides a summary of the joys of amateur astronomy to help new and less engaged amateur astronomers determine what they might be missing. Whether you are new to amateur astronomy or already involved, what joy or joys might you be missing? Let's find out.

Knowing – From the time of the ancients onward, generation upon generation has looked up at night to the heavens above in awe. Under the proper conditions, what we experience today can bring amateur astronomers even greater joy than that experienced by those before us because we know more about this world, this multi-layered sky. Allow me to explain.

The first layer of the sky consists of those things that can be seen with the unaided eye – the constellations and the appearance and motions of the sun, moon, planets, stars, and Milky Way. This is the layer of the sky that the ancients experienced. We see the star-studded constellations and Milky Way move silently overhead at night as part of a giant celestial clockwork. We see the sun cross the sky and note the moon change place daily and exhibit a complete set of phases monthly. We experience eclipses of the sun and moon and view the transits of planets across the face of the sun.

We observe occultations of stars and planets by the moon. We see planets moving forward and backward – prograde and retrograde – among the constellations of the zodiac. We see individual stars, colorful, scintillating, and sometimes changing in brightness. We see meteors and comets. We see the Milky Way from our vantage point within an assemblage of hundreds of billions of stars, crisscrossed by dust lanes, in a place that we call home. Under skies untouched by light pollution, we can still see what the ancients saw, and do so with even greater joy because the mystery (and sometimes the fear) has been replaced by knowledge.

The second layer of the sky consists of things contained within the Milky Way. Here we see the life stories of stars played out – their births, their lives, and their deaths. Today we know that stars are other suns, boiling caldrons of radiant plasma, and so much more. We see binary stars and know through study the details about individual components. Those smudges of light we so often see are reflection and emission nebulas, star clusters, planetary nebulas, and supernova remnants. Through study we have come to know star clusters and have surmised how individual stars are born, live out their lives, and die even though the process takes place over billions of years. We come to know about planetary nebulas, white dwarves, novae, supernovae, and black holes – stars whose lives have ended in the most peculiar ways. Most of these sights are within reach of readily available amateur telescopes and viewing them adds to the joys of amateur astronomy.



Amateur Astronomy Today. Image credit Wikipedia

The third layer of the sky is the cosmos on a grand scale with its nearly countless number of galaxies located far beyond the boundary of the Milky Way. While we can see a few brighter, nearby galaxies without telescopes under the proper conditions, we can rely on professional astronomers to examine their motion and know that the universe is expanding from an explosive start that occurred some 13.8

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billion years ago. On the scale of our local group of galaxies, we find that the stars within galaxies don't move as they should suggesting to us that a vast amount of the matter in the universe is "dark" and virtually undetectable, much like the Cheshire Cat from Alice in Wonderland who we know only from its smile. On the grand scale, we have come to conclude there is a mysterious "dark energy" forcing the universe to expand faster and faster. Like the universe that surrounds us, astronomy is endlessly fascinating.

Observing – The wonders that one can behold during an evening of viewing through a telescope – the moon, planets, comets, asteroids, stars, clusters, nebulas, galaxies, and quasars – can be stunning to behold. The wonder is increased by actually seeing the object with our own eyes rather than viewing an image of it. Nowhere is this more obvious than with those who think about what they see – those who observe rather than merely see. Those who observe using both eye and mind experience more joy than those who see with the eye alone. Additional joy comes from knowledge of the fact that we are experiencing photons that have traveled for vast periods of time over the great voids of space to end their trips in our eyes. Observing celestial objects about which we are well informed can be endlessly fascinating to those who observe, even after viewing the same object time and again. Each season – spring, summer, autumn, and winter – holds its own surprises that are renewed on an annual basis just by looking up.

Another of the joys of observing is the sense of accomplishment experienced by those who have completed an Astronomical League observing program. These observing programs typically consist of a whole group of objects such as asteroids, comets, binary stars, open and globular clusters, and various types of galaxies. Some groups deal with a variety of things such as Messier objects, Herschel objects, Caldwell objects, and so forth. The Astronomical League's observing programs (see <https://www.astroleague.org/observing.html>) are activities with which all amateur astronomers should be involved if possible. These programs not only provide a sense of accomplishment and pride when completed, but also serve as motivation to joyfully discover and learn more about the heavens above.

Observing the starry night sky with others adds another joyful dimension to amateur astronomy. The camaraderie, the esprit de corps, of amateur astronomy develops and is experienced when viewing with others. It's fun to share one's eyepiece and personal enthusiasm and experience the excitement of others when comparing observations using

more than one telescope. While some amateur astronomers like to view together – teaching and learning as they go – other amateur astronomers find that astrophotography provides a sense of satisfaction and joy as well.

Imaging, the process of taking photographs of celestial objects, is just as fascinating for many amateur astronomers as is visual observing and the sharing of observations. What the eye cannot reveal, the telescope and camera can and do. For instance, while viewing a galaxy through a fair-sized telescope (8"-12" aperture), observers usually see what appear to be "faint fuzzies." Some are circular, oval, and even lenticular, and most are quite diffuse. Some have almost stellar cores, and spiral patterns can be directly observed with the aid of a telescope in a few. What is more, however, is the fact that photographs reveal what the eye simply cannot detect on its own. Cameras have the ability to gather light in a way that the human eye cannot. Images produced through the use of cameras and telescopes offer new spectacles that visual observers cannot enjoy in any other way.



M101, The Pinwheel Galaxy. Image credit Scott Wade, TCAA

Astrophotographers are sometimes ready to point out that many things go missing when directly observed with the eye, that they can see what the eye and telescope together cannot reveal. They get a tremendous sense of accomplishment after many hours of stacking and processing images and often find delight in sharing their work with others.

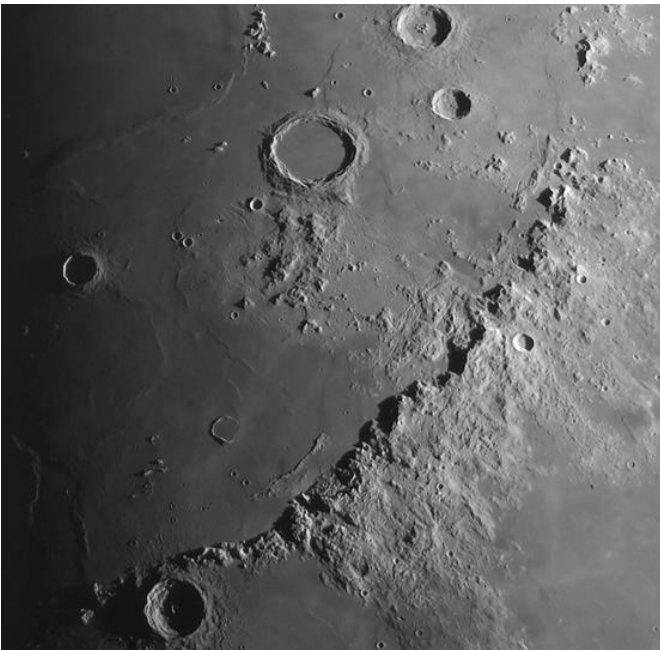
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Taking nice pictures of celestial objects aren't the only things that amateur astronomers do today. Some study the motions of binary stars, find and track asteroids and comets, perform visual or photographic photometry on variable stars, take spectra, and even develop and use radio telescopes. The variety of things that our more expert amateurs do sometimes approaches what professionals do. Amateurs are taking advantage of the technology of professionals, if only on a smaller scale.



The Solar Spectrum, by Tim Stone, Twin City Amateur Astronomers

Experiencing – Experiencing the technological marvels of modern amateur astronomy can also be a great source of joy. To technophiles, amateur astronomy is often a way to ride the crest of the wave associated with technological advancement. Today we have goto telescopes, auto finders, auto trackers, digital still and video cameras, image stabilizers, observing aids and telescope controllers on cell phone, tablets, and computers. Image acquisition, stacking, and processing software abounds. Today's amateur astronomer can rival the imaging capacities of the world's largest professional observatories only a generation ago.



The Lunar Surface. Image credit Tim Stone, TCAA.

Telescope making was quite the rage from the 1930s onward. Amateurs began to build larger and larger reflecting telescopes. Later, the rocker-box Dobsonian telescope design led to the development of light-bucket telescopes with 17.5" apertures and above not all that uncommon. With the advent of commercial telescope makers in the 1960s and continued growth ever since, it became possible to acquire at reasonable prices instruments of many varied sizes and designs that satisfy every desire and need. It's not terribly uncommon today to find amateur groups in possession of telescopes from 24" to 32" in diameter some of which are nothing short of professional grade.

A half century ago the standard amateur telescope was either a 60mm refractor or a 4.25" reflector. Anything larger was probably home built and then everything had to be found by using setting circles, star hopping, and sweeping. In addition to developments in the production of apochromatic optics, the production of mounts also flourished. The observing equipment available today to amateur astronomers is little short of amazing. As a result, it's not at all unusual for an observer to view 50 to 60 objects in the course of an hour or two using computer technology with modern goto mounts. Amateur astronomers today tend to see much more than they did in the not so distant past.

Small commercial observatories became available to amateur astronomers starting in the 1970s. Today it's common to find domed and roll-off-roof observatories owned by clubs and even individuals. In some cases, rotating domes are interfaced with the telescopes within so that the proper alignment between the optical axis of the telescope and dome slot is precisely maintained. Some amateur observatories are so advanced that they can be operated remotely with little to no human intervention.

Because of vast improvements in remote control via computer networks, it is now possible to utilize telescopes around the world – both optical and radio – from the convenience of one's home. I personally have utilized photographic telescopes in Chile, Australia, and elsewhere to image the night sky that I cannot directly observe from my home in Illinois. I once regularly used the 60-foot diameter radio telescope at the National Radio Astronomy Observatory in Green Bank, West Virginia, to observe quasars and other radio emitters using my desktop computer. All this came by way of being an amateur astronomer.

Another of the great joys associated with amateur astronomy is experiencing world travel, at least for those so disposed.

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Many amateurs have traveled the world in recent years to view total solar eclipses from remote locations, some of which they would never have visited were it not for the possibility of seeing a striking solar-lunar phenomenon. Not only do they view the moon crossing over the face of the sun, they make memories that last a lifetime. The encounters with amazing cultures, languages, foods, and historical locations all serve to making these memories. They also meet many kindred spirits along the way with whom they will or have experienced the celestial wonders. Many lifetime friendships are forged as a result of these experiences.

So it is with attending astronomy conventions at the state, regional, or national levels. Attending NCRAL or AL conventions is a highlight for some amateur astronomers each year. Experiencing amateur astronomy through the eyes of others, meeting well-known speakers, visiting club and other important astronomical facilities also can bring the convention attendee lots of joy.

Sharing – Another of the many joys that amateur astronomers experience is sharing their love of all things astronomical with those who are not amateur astronomers. This is the joy of public outreach which typically takes the form of participating in public viewing sessions where opportunities to give presentations, sky lectures, and showcase celestial objects through their telescopes to visitors are involved. Many members of astronomy clubs go home feeling quite fulfilled for having participated in public viewings sessions. The memories of the oohs and ahhs of someone who has seen Saturn or the moon for the first time tend to stick with those who made it possible. Answering questions and feeling the satisfaction of one who knows and is seen as an authority are reasons enough for joy.

Not to be forgotten is the use of media to promote amateur astronomy. Not a few among us will write weekly or monthly columns for newsletters, newspapers, listservs, and various forms of social media. For instance, some will use inexpensive software to create stunning views of the night sky, illustrating a particular point that can be exported for use with Facebook, Twitter, and the like. Being creative – both visually and in a literary sense – brings joy to many amateur astronomers.

There is yet another joy of sharing, and it is that which comes from educating one's club members – by either giving whole group presentations to active or and even “armchair amateur astronomers,” or working one-on-one with eager new members. There is much satisfaction in teaching others about astronomy and how to become a practicing amateur

astronomer. While it's fun working with adults, it can be particularly enjoyable to work with youth. Youth are so impressionable and eager to learn that even their career paths can be greatly influenced by working with knowledgeable and experienced amateur astronomers.



TCAA class funded by NCRAL Mini Grant. Image credit C. Wenning

Serving – Serving one's local, regional, or national astronomy groups is an excellent outlet for those with specialized interests. For instance, some members relish the leadership roles of Board member or president in their clubs, and those “on their way up” in the leadership ranks often serve as vice presidents or in some other official capacity. Those with writing interests and skills often serve as secretaries, newsletter editors, historians, and web masters. Some groups have even gone on to host regional and national conventions for Astronomical League, and certain individuals have even become national officers.



Northern Lights newsletter masthead. Image credit T. Dufek, PAC

Knowing, observing, experiencing, sharing, and serving are the keys to the joys of amateur astronomy. Participation also can be rewarding. For instance, those who like to observe the heavens or provide other services can easily earn rewards in the form of plaques, certificates, pins, and recognitions from the Astronomical League, their Region, or their astronomy club.

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Astronomical League has a plethora of awards in addition to those associated with its many observing programs. There are so many awards, that readers are directed to the following link: <https://www.astroleague.org/al/awards/awards.html>. It should be mentioned that a number of NCRAL members have been recognized with AL awards in recent years through several of these prestigious national award programs.

Additionally, NCRAL presents annually its Region Award that is used to recognize those who have experienced the joys of amateur astronomy through the acts of knowing, observing, experiencing, sharing, and serving. The recipients of the NCRAL Region Award are the de facto authorities when it comes to the joys of amateur astronomy because they are so involved in every phase of amateur astronomy. The Region also awards annually the NCRAL Newsletter Editor Award in recognition of dedicated service. The Region also has its Seasonal Messier Mini Marathon observing program along

with its certificates and pins. All award winners are recognized in the pages of the Region's *Northern Lights* newsletter.

Some NCRAL affiliates also have awards. My own club, for instance, has four honorary awards: Lifelong Honorary Membership, membership in the G. Weldon Schuette Society of Outstanding Amateur Astronomers, the Kieviet Founders Award, and the Miller Family Award. Many clubs present similar awards to their members in recognition of various aspects of service or expertise. All these awards also are a source of joy to amateur astronomers both when they are presented and when the announcements appear in a club's publications.

So, there you have my perspective on the joys of amateur astronomy. While this list might not be all inclusive, it does suggest the abundance of joy that amateur astronomers can experience, but only if they immerse themselves fully in the hobby of amateur astronomy.

THE STATE OF OUR ASTRONOMY CLUBS: HEALTHY OR AT-RISK?

~ by Carl J. Wenning, NCRAL Chair (2017-2021)

This article first appeared in NCRAL's *Northern Lights* Newsletter, [Autumn 2020](#)

With all the talk about COVID-19 over the last nine months, it's hard for me not to think regularly about health. Recently, my concern about my personal physical health was generalized into a concern about the health of NCRAL affiliates. What prompted this concern was a recent review of affiliate contact information on the NCRAL web site. Considering that a significant part of this information is inaccurate following several requests for review and updating, I couldn't help but wonder if some of the NCRAL affiliates are at risk. Only a couple of years ago NCRAL lost an affiliate when it dissolved while in the process for planning to host the Regional convention.

This concern for NCRAL's three dozen remaining affiliates prompted a considerable amount of introspection on my part concerning the following question, "What are the characteristics or traits of a healthy astronomy club?" Knowing the answer to this question and using that information to assess our NCRAL affiliates' lives is essential to their – and the Region's – continued well-being and longevity.

Several years ago, I wrote (and recently updated) TCAA Guide #3 – Astronomy as a Hobby (available with other TCAA Guides at <http://tcaa.us/TCAAGuides.aspx>). In this Guide, I lamented that many, if not most, members of the general public don't have a clue about what it means to have a hobby. I then provided descriptions about what having a hobby entails.

Now, I wonder if a similar lack of situational awareness doesn't also extend to the point where a club's members can't answer the question, "What constitutes a healthy astronomy club?" It's a question worth asking and answering especially with the recent influence of the COVID-19 pandemic that has undoubtedly affected all of our club and not necessarily for the better.

Bear in mind that this question is a question in general; I have no particular club in mind. Please stay with me as I muse about assessing the health of our Region's astronomy clubs. It might help to establish the wellbeing of your club or lead to healthy changes if it is, in fact, at risk.

Basis of Diagnosis

I want to help affiliates answer the question about their clubs' health using the analogy of determining the health of a

human body. A club is, in a way, a living organism that has been born, has specific aims and goals, is actively living out its life, and will eventually die if not properly cared for. I play the role of a doctor in this analogy. As such, I need to explain my qualifications for diagnosing problems. I'll forego offering any cures, but cures to any problem diagnosed should be apparent to those who read through to the end of this work.

I have been an amateur astronomer since falling in love with the stars and planets one night in July 1957. It was then that my grandfather showed me the night sky for the first time. I saw the stars, Milky Way, Venus, and Jupiter from a dark rural setting, and was deeply impressed. That initial impression has stayed with me to this very day.

I have been associated with my club, the Twin City Amateur Astronomers, for 42 years now, and I was also a member of several other clubs before that. I've held every elected position within my club but for that of Treasurer. I have been involved with NCRAL as Chair since 2017 and speak to a lot of amateur astronomers over the course of a year. I also have been to a lot of conventions, meetings of astronomy clubs, and star parties. All of these have given me a bit of perspective and constitute what might be considered my "medical degree" for the sake of this article.

Now, let me tell you – in my opinion – what every astronomy club needs to be healthy. Then, I'll provide readers with ideas about how to perform a checkup of their club to see if it is healthy or at risk of dying. But first, what does it mean for a club to be healthy?

What Does it Mean for a Club to be Healthy?

Because we are reasoning by analogy, we first need to determine what it means for a human body to be healthy. Here is a definition that I like: Being healthy consists of being in a state of complete physical, mental, and social well-being that allows a body to grow, thrive, and achieve its purposes; being healthy is not merely the absence of disease or infirmity. With this definition of health as a basis, let's examine the characteristics of a healthy club.

Every club needs specific organizational structures if it is to grow, thrive, and achieve its purposes. Organizational structures are very much like a body's skeletal framework. If

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the structure of bones does not exist, then the body – though living – cannot accomplish its ends. Instead, it rests as a quivering pile of flesh. What then are these necessary structures? Here are a few to consider: o

- **Bylaws or constitution**, either of which serves to clarify the aims of the club and as an organizing document to provide structures for effective governance.
- **Office duties** should be available in a highly detailed document so that everyone knows the expectation and responsibilities associated with the various offices.
- **Officers** who are both reactive and proactive leaders with visions aligned to the club's principle aims rather than solely reactive or inactive placeholders.
- **Diverse leadership** so that not too much reliance is placed on one person, officer or otherwise.
- **A multi-year plan** that includes general goals and specific objectives aligned with the aims of the club that can serve as a basis for ongoing assessment of progress.
- **Membership dues** that allow a club to not only help achieve its aims, goals, and objectives, but also provide a stake in the club and allow the officers to know who the club's members are.

Every club needs effective communications if it is to operate smoothly. Pretty much gone are the days when a person would pick up a telephone to call another. That still happens between friends, but this is not often the case among mere acquaintances and strangers. Many people are hesitant to phone those they do not know well. While such phone calls still happen, more modern means of asynchronous communication are often preferred in these situations. Here are the necessary forms of asynchronous communication that clubs need in this modern era.

- **Listservs** that provide pathways for informally communicating immediately with other all club members on an as-needed basis.
- **Social media** such as Facebook and Twitter that reach a lot of people – members and otherwise. Members can read and share posts with other members and members of the public to increase the visibility of a club.
- **Meeting minutes** so that those who miss a meeting can be kept apprised of the events that have transpired. It is best that approved minutes be made available in a newsletter or web site or disseminated through a listserv.
- **Newsletters** with lots of astronomy and social content so that members remain informed and feel connected to and involved with their club.

- **Web sites** that can easily be found with search engines, and detailed information can be provided on demand.

Not to be neglected are membership resources to be use on an as-needed basis. Many people join clubs to gain access to material resources because sometimes they cannot afford quality items of their own, or if they have them, they don't know how to use them. Consider the following valuable astronomy club resources:

- **Quality loaner telescopes** can be items of significant value to those without them. Some people join clubs to gain access to loaner telescopes and be assisted in learning how to use them. They want to avoid the pitfalls of unknowingly purchasing toy telescopes that will do little more than frustrate them after the first views of the moon and Saturn's rings.
- **Observing sites** are essential if members are to enjoy the hobby of amateur astronomy. Having a place to set up a telescope that provides a dark sky and protection from direct light is critically important. Without such sites, precious little observing will get done, and the hobby will lose its appeal to those who want to look at the heavens.
- **Observatories** are ideal for those who want to view year-round. During colder months, observatory walls and domes can protect from the cold blowing wind. Observatories also provide a degree of security from those things on the outside that might do the observer harm.
- **Regular meeting locations** such as a clubhouse, nature center, planetarium, museum, or community center are essential to the existence of a club. Without a place that a club can call home, clubs often meet in locations where they are sometimes welcome and other times merely tolerated. If the latter is the case, once a formal gathering is over, out they go!
- **A listing of membership benefits** can be very helpful to members, new and old alike. My club, the TCAA, has an extensive listing of membership benefits that is updated regularly. See this listing among our TCAA Guides at <http://tcaa.us/TCAAGuides.aspx>

Every club needs astronomical activities that can be used to engage members and the general public.

- **Membership meetings** constitute the glue that holds any club together. The key players don't need such meetings due to their constant interactions; however, those on the fringes of a club do for reasons that will become clear.

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- **Welcoming procedures** are critical to have in place for new members. This sometimes consists of a welcoming committee plus effective means of establishing communications. Without such procedures, membership often becomes a revolving door with members paying dues one year and departing a club the next.
- **Meaningful communication** is what builds relationships and is the glue that holds a club together. There is nothing more critical to the forging of friendships than significant face-to-face interaction. Casual conversations that consist of only niceties (“Wow, aren’t these cookies great?!”) do little to further the relationships necessary to build and bind a club’s membership. Clubs must provide regular opportunities that engage members in meaningful conversations if they are to welcome, integrate, and retain new members.
- **Educational offerings** for the club’s membership are critical to convert those new to amateur astronomy into experienced members. Members-only talks, activities, and observing sessions provide opportunities for the newbies to get to know and learn from the pros. Educational activities should be accessible to a variety of knowledge levels, not just one.
- **No-agenda social events** provide opportunities for members new and old to focus on something other than astronomy. From such events interpersonal relationships are forged. Sometimes it’s nice just to get together to have a meal or share a drink and experience the camaraderie of amateur astronomy.
- **Public outreach** is a key that motivates many amateur astronomers. While they love astronomy, they also enjoy giving talks and showing people around the heavens using their telescopes and explaining what viewers are seeing.
- **Active observers and imagers** are the heart of any astronomy club. New club members who look forward to getting out under the stars are unlikely to be unimpressed by a group of armchair amateur astronomers.

It’s only when astronomy clubs have the requisite structures, communications, resources, and activities that they can perform at their optimum to achieve the club’s aims, goals, and objectives. While these four traits are necessary, they are not sufficient conditions to ensure that an astronomy club is healthy.

Merely counting the marks on a checklist – “Do we have this? Yes. Check! Do we have that? Yes. Check!” – is inadequate for determining the health of a club. A club can have all of the

checklist items and still not be operating with optimum health. You might wonder why. Here, in my opinion, is why this is so.

A checklist evaluation is quantitative but in no real sense qualitative. Quality is just as important as quantity, and perhaps even more so. A club might check every box on a club-needs checklist and be misled into believing that they are “doing enough” for their members. That’s not necessarily so. Here is a list of examples that illustrate this point.

- A club might have elected officers, but perhaps they are satisfied to be merely reactive place holders rather than the proactive leaders a club needs them to be.
- A club might have a newsletter, but it might not contain the most interesting and useful information.
- A club might have a dysfunctional website that is either fails to provide adequate information or is not kept up to date.
- A club might have a listserv, social media, and a web page but if few members access, them they are close to being worthless.
- A club might have loaner telescopes, but they might be in such poor condition or are so inaccessible that no one wants to use them.
- A club might have social activities, but new members might feel unwelcome or excluded for any of a number of reasons.
- A club might host public viewing sessions, but does a poor job inviting attendees to get involved in the world of amateur astronomy.

If we are to assess the health of a club fully and honestly, we must look beyond the checklist of structures, communications, resources, and activities. Let us therefore diagnose a club’s health by looking at its most important aspect – the membership.



Performing a Meaningful Club Checkup

To conduct a proper diagnosis of a club's health, one must look at the membership – the life force within a club. Consider the following questions about membership that reveal a club's actual health in my opinion.

- **Inclusivity** – Does your club have a membership that reflects your community? Does it include those of diverse backgrounds (education, sex, race, creed, etc.) and make everyone feel welcome? Is the leadership involved in club activities to the exclusion of the rank-and-file membership?
- **Age distribution** – Does your club membership consist primarily of older individuals? If it does, add 20 years to the age of everyone in the club and see what you have left two decades from now if the club does not attract and retain new members. A healthy club will have a mix of new, intermediate, and long-time members.
- **Units of membership** – What is the primary unit of membership of your club? Does your club consist mostly of individuals, or is there a mixture of singles, couples, and families? Clubs comprised of primarily singles will rarely be attractive to couples and families.
- **Friendships versus acquaintances** – How good are the relationships among the members of your club? Are your members friends or merely acquaintances? If members gather for a club meeting or event and depart immediately after it concludes, then there are few real friendships. If members linger long after the end of an event to socialize, then you are seeing an indication of friendship.
- **Shared responsibility** – Does your club membership consist of a mixture of types when it comes to give and take? Granted, the old pros are most qualified to provide training, answer questions, conduct the club's business, host observing sessions, produce the newsletter, manage the web site, and such, just like the newbies are most likely to be on the receiving end. That's fine and as it should be. However, when it comes to the long-time members, is there shared responsibility for what goes on in the club, or does it always fall on the same few people to get things done? When this happens, there is a lack of equitable relationships, and a club can, in the long term, be at-risk.
- **Engagement** – Just how involved are the members of your club in its activities? My experience with more than four decades of involvement in astronomy clubs has shown me that typically 20% to 25% of a club's dues-paying members are actively engaged in club activities.

The unengaged members seem to be content to support a club financially by paying dues, and there's nothing wrong with that. Nonetheless, successful clubs often will have a much higher rate of engagement with their members because they are doing things right. Be implication, if 75% to 80% of a club's members are not engaged with its activities, then there must be some sort of undiagnosed problem.

By answering these questions about the membership of your club honestly, you will have some sense about your club's real health. If you have a healthy club, congratulations! If your club is at-risk, then you have your work cut out if you care to see your club grow and thrive now and into the future.

Diagnosis, Prognosis, and Treatment

As I mentioned at the start of this article, it is sometimes helpful to reason by analogy. Let's use our analogy one final time. Every good doctor is concerned with the health of the patient. This concern takes the form of diagnosis, prognosis, and treatment. Diagnosis tells us what is wrong; prognosis tells us what we can expect with or without certain treatments. Applying a proper treatment is what must be done if we can give legitimacy to the hope of avoiding an undesirable prognosis.

By reviewing the data from your club generated by reflecting honestly on the membership questions, you are making a diagnosis. What you decide to do with that information will result in treatment. If your club is at risk and you apply either the wrong or no treatment at all, then the prognosis cannot be good.

Unless a problem is properly identified, no solution is warranted. Treating symptoms rather than causes will not result in effective long-term solution of a problem, and the long-term prognosis can't be good.

Putting Knowledge to Work

I encourage you to give your club a health checkup! This isn't something that should be done alone, however. As in any important medical decision, its best to have a second opinion and then assess the differences based on evidence and logic. Only then can you be reasonably sure of the suitability of a particular diagnosis, treatment, and prognosis.

I recommend that clubs gather a cross-section of members to begin diagnostic efforts and work out potential treatments.

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Note that I didn't say to pick your leaders or most active members. If you want to obtain an honest perspective on the health of your club, you'll include in your discussion young through old, new through long-time, male and female, singles, couples, families, leaders and followers, the quiet and the outspoken... a representative sampling of your club's membership. Only then will you be able to get a good understanding of the health of your club.

In light of this article, talk about each of the factors that are essential to ensuring the good health of a club - structures, communications, resources, and activities. Talk about the nature of your membership. Identify the problem(s) and then work out some practical solutions. Come up with specific goals and avoid merely developing broad resolutions that will

do little to improve the health of your club. Develop activities, create a timeline, set clear expectations, establish benchmarks, and assign specific duties to specific individuals. All these are necessary to help your club make and assess progress toward its goal of improved health. When deciding on a course of action, don't merely ask the question, "*Is this a good idea?*" My nearly 50 years of experience in social organizations is that you'll get lots of people to respond with platitudes in the affirmative to this question. A positive response to this question does not, however, provide leaders with any sense of commitment. The real question that needs to be asked is, "*Will you support this activity with your time, talent, and treasure?*" It's only when you get an affirmative to this latter question that you will know you are on the right path to returning your club to a state of health.

WHAT MOTIVATES MEMBERS OF YOUR ASTRONOMY CLUB?

~ by Alan Sheidler, President, Popular Astronomy Club ~

This article first appeared in NCRAL's *Northern Lights* Newsletter, [Autumn 2020](#)

As I am writing this article, I just received a draft of the August edition of the Popular Astronomy Club (PAC) newsletter Reflections. Recently, PAC's newsletter has greatly increased in size. Amazingly, the August issue has more than 50 pages. Not only is this a testament to the hard work of our newsletter editor, Terry Dufek, it is also an indication of an active and enthusiastic club.

In the midst of the Covid-19 pandemic, the club has shifted its focus to refurbishing the Paul Castle Observatory and conduct of club observing sessions. Although public events have been canceled, members have stepped up to work on updating the observatory and pursue their own observing programs.

A number of us have completed NCRAL Seasonal Messier Mini Marathons and pursued observing of solar system objects such as Comet NEOWISE, Jupiter and Saturn, all of which have been simply outstanding objects this summer. All of this club activity has captured the attention of NCRAL leadership. Carl Wenning asked me to write an article about what motivates people to be involved in PAC's club activities. So here is my attempt to jot down some thoughts.

PAC is indeed active, but contrary to what has been suggested, I doubt, as president, that I can take a lot of the credit for the club's success. Basically what I do as president to motivate is make suggestions, encourage people, and then let things happen. This is what I think is happening, for example, with our observatory update project. Having a competent and enthusiastic observatory director (Rusty Case) is also a huge advantage. But everybody is pitching in and helping with it. Even folks that typically don't come to club meetings or observing sessions have stepped up to work on the observatory. It has also been refreshing to have the Holt boys (Alex and Hugh) working on the observatory, driving screws, running power tools, hammering nails, and just being involved proves there's more to astronomy than "meets the eye" if you know what I mean?

One thing I think has helped encourage folks to participate in club activities is acknowledgement of participation. Every time the club gets together, we have a group photo. People love to be photographed and identified in the group. They think it's funny too when I set my camera on a timer, push the shutter release button and then run to get in with the group before the camera takes the picture. They love it too when

they are photographed by their scope. Our club's newsletter is an outstanding tool for recognizing members, to highlight activities and show off astrophotography.



Finishing up the rebuild of the Paul Castle Memorial Observatory

As I am writing, I realize that acknowledgement is very important. Folks love the NCRAL Messier observing program, I think, because it is an opportunity to get recognized officially for having done something. These mini marathons are pretty easy to do too, which I think is critical to getting folks involved with observing.



Recently receiving Mini Marathon certificates were this article's author Alan Sheidler along with Wayland Bauer and Eric Sheidler.

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Allowing the use of a GOTO scope enables many folks to succeed in finding the objects, many of which are difficult to discern in today's light polluted skies. I think this is a great program. I encourage everyone to get involved in doing one or more of these seasonal mini marathons. You won't regret it as a participant, and if you are club president or observing. Finishing up the rebuild of the Paul Castle Memorial Observatory chairperson, it is a great excuse to convene a group to get out under the stars and do some observing.

At observing sessions, the emphasis should be fun and enjoyment. PAC observing sessions are a lot of fun. I really look forward to them. There's a lot of joking around. Everyone is "doctor" or "professor" of something (whether or not they really are or not). This is a way of highlighting whatever it might be that the person is doing or observing at the time.

We also have a mix of visual observers and imagers at our club sessions. The visual guys are always inviting folks to come over and look in the eyepiece. The imaging guys are actually doing this too though – they want folks to come over and look on their laptops at the object they have on the screen. A couple of us have large flat screen monitors upon which we show live views of Jupiter, Saturn, etc., and time exposure images of deep sky objects. Everyone gathers round to see what's on the monitors and laptops. We started doing this "TV screen" observing thinking we would do it during our public outreach sessions so that visitors could social distance more easily. But, as we have become proficient with it, we have found this is actually a great way to do astronomy. Of course, this flies in face of the traditional conduct at observing sessions (dark adaption is not possible if you are staring at monitors, for example). But the jocularity, spontaneity and enthusiasm during these observing sessions is contagious and exemplifies enjoyable, casual conduct during a "star party".



A typical PAC observing session at Paul Castle Memorial Observatory.

I think the key is keeping things fun, simple, and low key. I am very jealous of some of the results I have seen by high-end astro-imagers. However, I realize these results demand a lot of effort and technical competence. Personally, I am a snapshot imager. If I can get a decent shot of an object in 30 seconds, I will do it. This enables me to do imaging more or less in real time at observing sessions with the group. I think this is more or less where many PAC members are right now, though there is a growing number who are continuously improving their imaging capabilities too. But I still love it when folks first "discover" an object and then burst forth excitedly to invite others to come quick to look at that incredible object in their scope or on their monitor. Never lose that magic!

Don't get me wrong, there is a place for the more accomplished astro-imaging folks. Their images are captivating art forms. There is something in this hobby for everyone. Just realize we are all indulging ourselves in different ways and for different reasons. Astronomy is a way for everyone to learn about science and admire the beauty universe. We all have diverse ways of doing that. Each club has a unique set of members with diverse experience and expertise. The challenge for club leadership is to divine their member's talents, desires and enthusiasm and then to encourage them to pursue their passions. Keep looking up



PAC members getting ready for their 4th of July Observing Session

CLUB LEADERSHIP FOR OUR TIME

~ by Carl J. Wenning, NCRAL Chair (2017-2021) ~

This article first appeared in NCRAL's *Northern Lights* Newsletter, [Winter 2021](#)

Each generation has its undisputed great leaders. When I think of great political and social leaders of the recent past, I think of Winston Churchill, Mahatma Gandhi, Nelson Mandela, Mikhail Gorbachev, Margaret Thatcher, Ronald Reagan, Mother Teresa, Pope John Paul II, and many more. Most leaders are ordinary and that's as it should be. Great leaders are rare and necessarily stand out among ordinary leaders, or else they wouldn't be extraordinary (from Latin for "outside the normal course of events").

Some leaders are strong whereas others are weak. Some are proactive whereas others are reactive. Some are at the front of a charge while others lead from behind. Some don't lead at all; rather, they merely occupy office. I have seen all types of leadership styles in my 50 years as a member of various astronomy clubs.

Due to the recent pandemic, it is my considered opinion that significant efforts will soon be needed by our leaders to rebuild amateur astronomy as we have known it. I also believe that there is a pent-up demand for the "services" of the amateur astronomy community. Thus, I am calling for renewed club leadership for our time!

So many of the networks that have sustained our clubs in the past have suffered due to the COVID-19 pandemic and its social distancing. Gone are most club meetings, group observing sessions, public outreach events, new member courses, state star parties, Regional conventions, and more. In addition, the memberships of some clubs have dwindled because some members see no sense in paying dues to a club in which they cannot participate. While Zoom and social networking have helped, the bonds that hold the rest of us together have undoubtedly been stressed and weakened as we've learned to do things on our own.

When I recently tried to order astronomical materials from two major suppliers, I was made aware of the fact that "we are experiencing unusual call volume due to the Coronavirus pandemic, so please be patient." After writing emails to these same suppliers, I was informed that it might take several days for a response "due to high volume." Disappointing personally, this comes as surprisingly good news for amateur astronomy.

With so many people sheltering at home, the number of amateur astronomers is either increasing or that already dedicated amateur astronomers are showing increasing interest in the hobby. Regardless of what is happening, amateur astronomy stands to benefit from the "unusual" demand and our clubs must prepare to take advantage of this situation.

After the pandemic, it will take good leadership to take advantage of pent-up interest and to rebuild our clubs, our Region, and our hobby. This article serves as both a reminder of the need for good club leadership and what sort of practices are important to effective club leadership. I also propose a new method for qualitatively assessing leadership within a club.

The Practices of Effective Club Leaders

Astronomy club leaders have important roles to play in the maintaining and renewing amateur astronomy regardless of their management styles. As I see it, the roles of club leaders are to *educate, motivate, energize, organize, and mobilize existing club members and recruit new members.*

Good leaders educate club members about the need to become active participants in amateur astronomy. From my experience of nearly 50 years in one astronomy club or another, typically only about 20% to 25% of a club membership is actively engaged in the hobby. The majority are satisfied with being passive participants – armchair amateur astronomers if you will. They need to be educated in such a way that they become more aware of the potential within the hobby and provided with avenues for both participation and success.

Good leaders motivate club members to become more socially engaged within their club community. This usually requires consideration of key human motivations: the need for affiliation, the need for achievement, and the need for influence. All humans have a need for some degree of human companionship, to form personal relationships, and to experience the concern for and by others. The human spirit also craves success by working toward and attaining goals. Every human it seems wants to prove their worth by sharing in responsibility for the greater community. Some aspire to

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greatness and are motivated by the ability to influence others and direct resources for the common good.

Good leaders energize club members to participate in communal activities. – Effective leaders make constant efforts to keep all members interested in the activities of the group. These efforts will include frequent email updates, writing messages for newsletters, encouraging participation in observing sessions, recommending readings, and so forth. The crux of energizing a membership is constant communication. Another key factor is energizing the membership by shows of appreciation and recognition of accomplishments.

Good leaders organize activities to engage the club membership. – Many club members lack the motivation or technical skill to bring others together for a common good. Effective club leaders will organize public and members-only observing sessions, organize interesting and informative membership meetings, and host special events for the public as well as the membership. The goal is to keep the members engaged with rewarding activities.

Good leaders mobilize club memberships. In effect this means to prepare club members for active service. Not only do effective leaders provide opportunities for service but ensure that members are capable of doing so. This often means providing club members with educational offerings and hands-on experiences. Clubs can produce guidelines, write procedural manuals, and hold training sessions geared toward specific practices.

Good leaders recruit new members. A club will not long survive if it doesn't receive a regular infusion of "new blood." Clubs invariably shed members due to a loss of interest, moving away of members, and death to name but a few. Those leaders seeking to recruit new members should carefully examine the recommendations that appeared in the **Northern Lights** newsletter last quarter (The State of Our Astronomy Clubs: Healthy or At-risk?, Autumn 2020, pp 11-14).

Producers and Consumers

I would be remiss if I did not mention something about a club's membership in relationship to its leadership as well. I'm sure that every concerned leader knows this, but it is bears repeating for those club members who are not keenly aware of this critical difference. Every club has members, all of whom can be said to be consumers of its goods and services.

Still, there are club members who can be considered primarily producers or primarily consumers.

There is a select group within each club that organizes events, gives talks, hosts meetings, schedules observing sessions, maintains observatories, writes newsletters, produces brochures, assembles meeting minutes, manages finances, donates materially to a cause, and so forth. These are primarily producers. There is another group within a club that tends to consume the offerings of the producers. In most clubs, the number of consumers tends to outnumber the producers, and this is understandable. In order to be a producer, one must be experienced with amateur astronomy. Those who lead know more than those who follow. To increase the number of those who tend to produce more than they consume, it is incumbent upon a club's leadership to bring consumers up to the point where they can become producers of a club's offerings.

Membership Performance Index

Just how well a club's leadership functions can be assessed qualitatively by what I propose to call the membership performance index. I define it as follows:

$$MPI = \frac{\text{number of major producers}}{\text{total membership number}}$$

If the number of major producers in relation to the entire membership is small, then a club's MPI will approach zero. If most of a club's membership consists of major producers, then a club's MPI will approach one. The MPI within a given club is a way of diagnosing the effectiveness of that club's leadership.

While it's difficult to put a precise numerical value on a club's MPI, even a casual examination will give some idea of the value. For instance, in a club the active leadership number (and therefore major producers) is about 10. This number includes board members, officers, and chairs of various activities who are leaders, not mere office holders. The club's total membership is about 50. Hence, this club's MPI is about 0.2. This is a rather low MPI, but not atypical of most clubs I suspect. In my estimation this club's leadership has its work cut out for it.

The purpose of presenting the MPI concept is not to evaluate or judge a club's leadership; rather, it is to help a club's membership to see whether something needs to be remedied in terms of how leadership is performing by looking at the

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number of leaders relative to the membership number. It's only when we look at our club's MPI and realize that there is a problem that we are likely to do anything about it.

Resources for Growth

The COVID-19 pandemic has produced lots of problems for astronomy clubs. These problems are not of our making. Sometimes, however, clubs do experience problems of their own making. Regardless of the source, problems affecting amateur astronomy must be addressed effectively if our hobby and clubs are to not only survive but thrive. *Taking charge of the effort to identify and reduce or eliminate problems is the role of a club's leadership.*

I have noted before that are several resources that clubs might use in order to increase the benefits to members. Most important among them are a series of guides, most of which I produced on behalf of the Twin City Amateur Astronomers. The TCAA guides can be downloaded through the following URL: <http://tcaa.us/TCAAGuides.aspx>. I encourage every reader to take the time now to view this group of 10 guides and determine which might be useful in your efforts to remediate the problems recently brought on by the pandemic. I also encourage readers to think about what good can come from a NCRAL mini grant. Consider looking through past issues of *Northern Lights* to see what the TCAA has done with the inaugural membership recruitment mini grant. In my opinion, the results were impressive. Lastly, think about what new initiatives can help your club recover from the pandemic. Each affiliate within NCRAL is an incubator of innovative ideas. If you discover something that works, be sure to share it with the Region through this newsletter.

Will having such "medicines" cure the "patient?" Not necessarily. If medicines are not taken or taken only sporadically, then they likely will not have their desired effect. Only when the correct medicine is taken systematically until an illness of entirely over will it be effective.

Every Member a Producer?

Now, I do not see every problem that a club encounters as a reason for criticism and recrimination of the leadership. Some situations are like a captain of a ship at sea beset by a storm. The captain is neither the cause of the storm nor responsible for the storm but has the responsibility of helping the crew weather it. When a ship's captain fails to give the crew the proper commands at the appropriate times, then the worsening situation or the sinking of the ship is rightfully the fault of the captain.

As I see it, the problems that an astronomy club faces are things that good leadership will address. As I see, problems present opportunities for growth. Given the problem of the pandemic and the evident pent-up demand for our services, the opportunities for growth seem considerable.

What is needed now is effective leadership. The first step club leaders should talk would be to conduct assessments of their clubs so they can identify areas where potential for growth exists. Once the problems have been identified, then effective solutions need to be worked out, proffered to the membership, and implemented following approval.

Is it too much to hope that every member will also be a producer, that a club's MPI will reach a value of unity?

BUILD CLUB MEMBERSHIP WITH AN INTRODUCTION TO AMATEUR ASTRONOMY COURSE

~ by Carl Wenning, Twin City Amateur Astronomers ~

This article first appeared in NCRAL's *Northern Lights* Newsletter, [Winter 2024](#)

We often hear comments about the “graying” of amateur astronomy. It’s true – in many locations. Some clubs are at risk of dying, just as much as is amateur astronomy¹. Because of so many cultural and social changes in recent years – including the growth and use of social media – many people seem to have forgotten what it means to have a hobby². Neither do they seem to be aware of the many benefits of having a hobby³. I addressed these topics in my TCAA Guide Astronomy as a Hobby, available as a free download from the website of my club, the Twin City Amateur Astronomers of Central Illinois.

After thinking about what it would take to help my astronomy club overcome this “graying” problem, I wrote two additional TCAA Guides: The Art of Sky Interpretation and Introduction to Amateur Astronomy, also freely available on the TCAA website. After a bit more consideration, I decided to offer, with the consent and assistance of my club, a three-session course for the general public based on the last publication and my prior experiences with adult education. I called the course Introduction to Amateur Astronomy (IAA) after the last publication, which only seemed reasonable.

The first IAA course was offered in the autumn of 2019 following a summer of promotion during our public viewing sessions, which were reasonably well attended by 40-60 individuals (including club members) each month, April through October. This first course had about 30 attendees, but the follow-up components of the course were abruptly ended during January 2020 due to the COVID-19 pandemic. After a hiatus of about three years, I again decided to teach this course starting in the summer of 2023, having learned from the mistakes associated with offering the course the first time. The second go around was much more successful than the first in terms of recruiting and retaining new members.

Due to the second course, our dues-paying membership increased by about 20 members representing seven households. Many of those households were multigenerational. More importantly, most of these families are now sticking around after the course – having become active in our club.

There are several reasons our course has become an effective recruiter and motivator⁴ of new members: (1) we provide participants with the sort of instruction that new members crave⁵, (2) we provide excellent, no-cost resources by way of our TCAA Guides⁶ and telescopes, (3) we work to socialize new members so that they feel welcome and part of the group⁷, (4) we teach this course during the summer, allowing for time during the latter part of the year when it’s still warm enough for new members to get out and observe, (5) we hold classes later in the afternoon in town and immediately follow up with observing at a rural dark sky site, (6) we promote follow-up participation in our private and public viewing sessions, and (7) we train them on the use of our observatory equipment, grant them with access, and give them constant encouragement.

Gone are the days when we take new member dues and hope that that’s enough to get them to stick around to become amateur astronomers! Ample experience we have all has shown that this simply doesn’t work. What is needed to make the change is a good set of offerings and effective club leadership.⁸

¹ Wenning, C., The State of Our Astronomy Clubs: Healthy or At-Risk? *Northern Lights*, Vol. 5, No. 2, pp. 11-14, Autumn 2020.

² Wenning, C., A Word about Hobbies, *Northern Lights*, Vol. 1, No. 4, p. 8, Spring 2017.

³ Wenning, C. The Joys of Amateur Astronomy, *Northern Lights*, Vol. 5, No. 1, pp. 10-13, Summer 2020.

⁴ Sheidler, A., What Motivates Members of Your Astronomy Club?, *Northern Lights*, Vol. 5, No. 2, pp. 15-16, Autumn, 2020.

⁵ Wenning, C., What do Members Want from an Astronomy Club? *Northern Lights*, Vol. 4, No. 3, pp. 5-6, Winter 2020.

⁶ TCAA Guides, <https://www.tcaa.club/guides>

⁷ The Results are In: Involvement with Your Astronomy Club. *Northern Lights*, Vol. 2, No. 3, pp 9-10, Winter 2018. (

⁸ Wenning, C., Club Leadership for Our Time, *Northern Lights*, Vol. 5, No. 3, pp 8-9, Winter 2021.

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Some 2023 IAA students with co-leader Tom Willmitch (center).

Our IAA course is broken down into three two-hour sessions. The first class deals with constellations, stellar and lunar motions, star maps, cellphone and tablet apps, direction finding, stellar magnitudes, and celestial coordinate systems. The second class deals with the celestial sphere, what to observe and how to find it, Astronomical League observing programs, introduction to binoculars and telescopes, how telescopes work, eyepiece field orientation, and recording observations. The third class deals with telescope types, eyepieces, powers of the telescope, finders, and mounts. Information about amateur astronomy in general and the Twin City Amateur Astronomers is liberally included in each lesson.

Each class session is taught under the dome of the Illinois State University Planetarium with the assistance of planetarium director Tom Willmitch who is also the president of our club. Classes typically begin with a PowerPoint. There is then a 20-minute break with refreshments (e.g., punch and cookies) and conversations with established members to ensure appropriate socialization of newcomers. Many of the conversations are started by and carried on with the assistance of several outgoing club members who attend the planetarium – some to learn, others to assist, but all so socialize new members. (Socialization is the key to retention.) The class then continues with a live planetarium presentation, demonstrating new concepts presented in the PowerPoints. Time is also given for constellation study using sky maps as a follow-up to homework exercises. Following each 3-5 PM session, the class reassembles after sunset at Sugar Grove Nature Center, where we have two rural observatories. Following the conclusion of the course, we train small groups of individuals on using a CPC 11" under a 10-foot Ashe dome.

Passing an informal test later, they are awarded a key to the observatory, providing unfettered access.



NCRAL Chair Alan Sheidler and author Carl Wenning with TCAA 20".

After the conclusion of the course, additional efforts are made to get more enthusiastic class members out under the stars using the club's 20-inch telescope at Waynesville Observatory. Training is provided with our PlaneWave that is mounted on an extremely user-friendly Astro-Physics 1600 mount. Operations with the 20" are augmented with the club's NVT image intensifier much to the great satisfaction of everyone. Overall, this program has proven quite successful in recruiting and retaining new members for the TCAA.

We charge a substantial "materials and membership fee," which adds subtle psychology to the course (nothing worth anything is free) and makes attendees members of the club if they are not already. Because we have a pro-rated dues-paying system that re-sets each February, a six-month membership is included at a reduced cost, making the course fee quite manageable. The course is offered free of charge to current members, but they are assessed a materials fee to help cover the cost of printing, refreshments, and planetarium access, for which we pay a token amount.

I encourage all NCRAL affiliate leaders to teach an Introduction to Amateur Astronomy course using the resources of the Twin City Amateur Astronomers. The TCAA freely shares its TCAA Guides and will gladly provide the three PowerPoint presentations and homework exercises we have created that go along with the course. Should you have any questions about setting up and teaching an Introduction to

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Amateur Astronomy course or wish to obtain our PowerPoints (which you are free to edit to your liking), please email me through this address: carlwenning@gmail.com.

Carl

WHY NOVICE AMATEUR ASTRONOMERS FAIL TO FLEDGE

~ by Carl J. Wenning, Twin City Amateur Astronomers ~

This article first appeared in NCRAL's *Northern Lights* Newsletter, [Spring 2024](#)

fledge, verb. 'flej. fledged; fledging. intransitive verb. of a young bird: to acquire the feathers necessary for flight or independent activity.

Long-time amateur astronomers have seen all too frequently how novice sky watchers who have joined our affiliates fail to transition as experienced observers capable of working independently. After a period of time, most newbies simply drop out of a club without even getting around to developing adequate skills or forming many, if any, meaningful relationships.

We should have all learned from prior experiences such as this that we can't expect new members to transition as expert sky watchers just because they have paid dues in our clubs and then hang around. Rarely do they learn the hobby simply by osmosis.

This expectation of osmosis, more than anything else, is the principal reason astronomy clubs fail to retain new members in my considered opinion. This problem can be overcome by socializing and educating new members, which does require intentional activity, effective leadership, and concerted efforts by the members of a club.¹ Another of the big problems with retention is that clubs often don't give new members what they expect to receive as a benefit of membership.² This failure-to-retain problem, however, is more complex than just this. After considerable reflection on recruitment and retention difficulties, I have realized that part of the problem rests on the shoulders of amateur astronomer wannabes. That is, the fault rests not entirely on the shoulders of club members. Before advancing solutions to this aspect of the problem, allow me to define the wannabe problem more thoroughly.

As I've mentioned in several of my prior writings, it's unreasonable to advance solutions to a problem until that problem has been clearly identified and defined. After doing so, I will suggest some actions that we, as club members,

might take to help novice amateur astronomers become full-fledged amateur astronomers.

What are the reasons for failure to retain that relate directly to the wannabe, and what can we do about it?

As I see it, there are five primary reasons why novice sky watchers fail to spread their wings and fly high with the rest of the more experienced amateur astronomers. They are the following:

Reason 1: Novices don't understand the nature of a hobby.

I have addressed this problem at considerable length in TCAA Guide #3: Astronomy as a Hobby.³ As I mentioned in this Guide, "A hobby is a regular activity in one's leisure time for pleasure. Hobbies – if they are genuinely hobbies and not merely passing interests – are time-consuming and often result in considerable expenditures." After explaining this, I describe the many benefits of having a meaningful hobby such as amateur astronomy. I then address what it takes to become an experienced amateur astronomer.

Before we start pushing guides, books, binoculars, and telescopes upon the wannabe, perhaps we should gently lead them through the metacognitive process of knowing what it takes to become an experienced amateur astronomer. After that, that's where the first of our TCAA Guides comes into play. Introducing new TCAA members to the hobby through the aforementioned Guide, we follow up with an introduction to visual astronomy.

As part of this process, we encourage reading TCAA Guide #1: Introduction to Amateur Astronomy.⁴ Even better, we usher novices through a three-month course in amateur astronomy that provides them with a basic understanding of the equipment of our hobby. We also introduce them to another Guide, TCAA Guide #4: The Art of Sky Interpretation,⁵ which

¹ Wenning, C. J., *Northern Lights*, Club Leadership for Our Time, Vol. 5, No. 3, pp. 8-10, Winter 2021.

² Wenning, C. J., What do Members Want from an Astronomy Club? *Northern Lights*, Vol. 4, No. 3, pp. 5-6, Winter 2020.

³ Wenning, C. J., TCAA Guide #3, Astronomy as a Hobby, https://tcaacontent-2923.s3.us-east2.amazonaws.com/guides/Astronomy_as_a_Hobby.pdf

⁴ Wenning, C. J., TCAA Guide #1, Introduction to Amateur Astronomy, https://tcaa-content-2923.s3.us-east2.amazonaws.com/guides/Intro_to_Amateur_Astronomy.pdf

⁵ Wenning, C. J., TCAA Guide #4, The Art of Sky Interpretation, https://tcaa-content.s3.us-east2.amazonaws.com/guides/The_Art_of_Sky_Interpretation.pdf

gives a good overview of the heavens and what we do and should know as amateur astronomers.

Reason 2: Novices don't give themselves enough time.

It takes considerable time to develop the necessary knowledge and skills of an advanced amateur astronomer. Today, many people are more than willing to throw money at a hobby without putting in the time required to learn the subject matter and how to use equipment effectively. This equipment might have acquired or gained access to by affiliating with a club. That is, they think the only thing required to be an amateur astronomer is lots of expensive equipment. Unfortunately, having fancy equipment does not an amateur astronomer make!

Again, advanced amateurs need to help novices plot the path to becoming accomplished amateur astronomers. They should point out necessary education, provide direct instruction in classes and planetarium work, encourage attendance at public viewing sessions, and mentoring through one-on-one field experiences. Depending on a club's resources, clubs might want to generate a set of official guidelines showing new members how to advance themselves. They must then be both invited and encouraged to participate in these activities.

Reason 3: Novices fail to plan, or their goals are too general.

Most novices don't have a clue about how to go about becoming an amateur astronomer. As a result, they just let each day take care of itself. They don't have a plan, though they might have a purpose. *A failure to plan is a plan for failure.* While a club might provide general guidance and a vast array of resources, new members don't know what to ask for and are frequently too shy to ask for advice or assistance. They must be encouraged to overcome this reluctance by being told that "the squeaky wheel gets the grease." Once members ask for help, they should be set up with a mentor who can provide the requisite one-on-one instruction with a purpose.

For instance, one high school member of the TCAA's Introduction to Amateur Astronomy course was successfully mentored by one of our members last summer. The wannabe wanted to learn how to operate the club's observatory telescopes and made his desires known, explicitly requesting

help. Within six months, he had learned how to capably operate our 11" CPC telescope at Sugar Grove Observatory and our 20" PlaneWave telescope at Waynesville Observatory, along with its image intensifier and filter systems. He subsequently earned our trust, his keys, and unfettered access to our facilities, housing a considerable amount of expensive equipment. This new member is only 17 years old and is well on his way toward becoming an accomplished amateur astronomer.

Reason 4: Novices have unreasonable expectations.

Many people will peer through the eyepiece of a telescope expecting to see Hubble-quality images. The Orion Nebula and such garner impressions of awe, but when they view the faint fuzzies known as galaxies, they often become disappointed, disillusioned, and back away from the hobby.

We need to help novice observers understand that many joys of amateur astronomy don't come only from the end of a telescope.⁶ Yes, we need to help them appreciate the many varieties and subtle differences among the things they are observing. We also need to help them overcome any disappointment by introducing new members to other aspects of amateur astronomy, such as constellation study, Astronomical League observing programs, promoting astronomy via social media, naked-eye observations, night vision technology, astrophotography, and so forth.

Reason 5: Novices make excuses.

How often have you heard it said that new members don't want to go observing because it's too hot, too cold, too far, too early, too late, too bright, and so forth? Perhaps they are too busy, overcommitted, or interested in other things. People will give many excuses – not reasons – for not getting out under the stars. (We also hear these complaints from many, if not most, of our established members.)

To become good at anything, one must commit time and effort. I've often said that I'd love to play a musical instrument, but I have never been willing to commit to the time and effort required to master a musical instrument. As a result, I'm not a musician. So it is with nearly every other area of life. Expertise comes at a price of time and effort. If one is unwilling to put in the time and effort, forget about the

⁶ Wenning, C.J., *Northern Lights*, The Joys of Amateur Astronomy, Vol. 5, No. 1, pp 10-13, Summer 2020.

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expertise. Experts are justifiably rewarded for their commitment.

In the past few years since the advent of COVID-19, the TCAA membership has grown from about 30 households to more than 75 today. If one were to tally the individual members, we would probably exceed 100. That's not a bad number given the fact that the Twin Cities of Bloomington and Normal, Illinois, total only about 100,000 citizens, including some 22,000 transient students enrolled at two universities. Other clubs might do as well following our approaches.

So, there you have it – some additional perspectives on recruitment and retention problems, this time focusing on the wannabes themselves. To better understand the conundrum that we all face – members, new and old – I encourage everyone to read or review the references to this article. The “leaky bucket” problem of recruitment and retention requires attention to both filling the bucket and stopping leaks in the membership bucket if we are going to make progress in raising its level.

Carl

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AMATEUR ASTRONOMER WANNABE CHECKLIST

~ by Carl J. Wenning, Twin City Amateur Astronomers ~

This article first appeared in NCRAL's *Northern Lights* Newsletter, [Summer 2024](#)

In the last issue of this newsletter, I mentioned the need for wannabe amateur astronomers to take charge of their own formation as such.¹⁵ I suggested in that article it would be helpful if wannabes were provided with a checklist of some sort for doing so. This guidance is important to helping newbies fledge, for without it they will probably end out dropping out of amateur astronomy.

At that time, I was mindful of the fact (to the best of my knowledge) that no club or individual had ever produced such a list. With this article, I'm making an initial effort to produce a rough draft of such a checklist in the hope that over the years others with new and more effective ideas can improve upon it.

I've long been a believer in the French proverb, "Never let the perfect be the enemy of the good." This proverb means that we should never get caught up in impossible task of making things perfect and — as a result — never get anything done. It is better to try and fail than never try at all. So it is with the present situation. While the following list might be faulty or incomplete, at least it's a start.

Here is my checklist of suggestions that tyros should follow that they might fledge as fully capable amateur astronomers:

- ✓ First, realize that you – dear wannabe – must take charge of your own education. Plot your course with this advice and follow it. Be mindful that a ship without a rudder will rarely arrive at the intended port.
- ✓ Read far and wide. There is no substitute from learning from the experiences of others who have already dedicate part of their lives to helping you achieve the goals you are pursuing. Read the many TCAA Guides¹⁶ developed by the Twin City Amateur Astronomers. Then, read yourself a free introductory college-level astronomy textbook made available by OpenStax.¹⁷
- ✓ Network, network, network! Go to astronomy club meetings and observing sessions. Join in on pizza parties and other special events. Actively circulate and introduce yourself, sharing one thing in particular about yourself that will make others remember you.
- ✓ Reach out and be the first to make an acquaintance. Know that camaraderie is based on familiarity with others. Get to know others and call them by name. Don't

forget to ask others about themselves, as for some, it is their favorite topic.

- ✓ As crazy as it seems, make a business card that you can use to familiarize others with yourself. Keep the card simple with your name and contact information, and perhaps an astronomical symbol to key the reader into the fact that you are involved in the community of amateur astronomers.
- ✓ Make your interest and desires known. If something interests you, ask question after question until you are satisfied. People tend to like enthusiastic newbies.
- ✓ Actively seek assistance from experienced amateur astronomers when it comes to observing and purchasing a telescope. Engage in a conversation with someone you feel has the knowledge and experience who is willing to teach and from whom you would like to learn.
- ✓ Don't purchase binoculars or telescopes until you have seen what's available and how the options work. Carefully chose your observing instruments based upon your needs.
- ✓ Don't throw away a lot of money purchasing expensive equipment that you might not need. This way you can avoid buyer's remorse that often ends many a hobbyists' career.
- ✓ Ask to be trained on club telescopes and observatories. Don't expect experienced amateur astronomers to help you learn the art of amateur astronomy by having them teach you how to use an inferior quality toy telescope.
- ✓ Get out there and observe with others. Ask to look through their telescopes. Have them tell you about their telescopes. Have them show you one or two things in the telescope and provide commentary about what they are showing.
- ✓ Ask lots of questions and listen more than you speak. Rather than showing others how unknowledgeable you might be, it shows that you are interested and willing to engage.
- ✓ Avoid being a know-it-all. There is nothing worse than a new member who thinks he or she knows everything. Be humble. Your knowledge will eventually shine forth if you are really that qualified.

So, these are just a few of the points to keep in mind as you start your journey as a wannabe amateur astronomer.

¹⁵ Wenning, C. J., *Northern Lights*, Why Novice Amateur Astronomers Fail to Fledge, Vol. 8, No. 4, pp. 9-10, [Spring 2024](#).

¹⁶ The TCAA Guides, ten in number, can be found at the following URL: <https://www.tcaa.club/guides>

¹⁷ Consider [Astronomy 2e](#) by Fraknoi, Morrison, & Wolff, 2022.