

Astronomers explore new frontiers while attempting to solve heavenly mysteries

OK, so you're finally convinced that the moon is not made of cheese. And you no longer believe in the man in the moon either. Congratulations, you've grown up and joined the real world.

Now take a step backwards. No, don't start looking for cows in the sky, but do feel free to let your imagination roam as you gaze at the stars. Look for comets, quasars and constellations. Now you've joined the world of amateur astronomy.

It's a brave new world, but not a very well-developed one in this part of the state. Texas A&M has no astronomy program to speak of, and offers only the bare minimum in astronomy classes.

However, the university does operate an observatory (with a dome and everything), and the few astronomy classes that are offered are always filled to capacity.

In the popular basic astronomy class, listed as Physics 306, students study the basic properties of light, the life cycle of stars, the origin and future of the universe, and the planets. And in the lab section of that course, Physics 307, students meet at the observatory (located near Easterwood Airport) and learn how to set up the observational equipment, how to use star charts in order to locate objects in the sky, and how to find celestial bodies without the star charts.

But Dr. Roger Smith, associate professor of physics and the man responsible for running the astronomy courses, says that there isn't anyone in the department who is really a genuine astronomer. He adds that there isn't any astronomical research conducted here, either.

Nevertheless, an active group of telescope-toting individuals in the Bryan/College Station vicinity sponsors a myriad of galaxy-gazing activities

throughout the year.

The Association of Amateur Astronomers is composed of about 60 members from all walks of life. Vice president Laurie Hazen says anyone interested in astronomy can join the local club.

"We've got students, housewives, business people, teachers, older members — from age 12 on up," Hazen says. "We've just got a little bit of everybody."

Hazen says she is definitely "the amateur among amateurs." But she took a liking to star-gazing, and got involved in the association.

"I've always enjoyed watching the stars — thinking, dreaming about what's out there," Hazen explains. She says the club offers budding astronomers a low-cost means of exploring the heavens.

The club owns telescopes which members can take turns borrowing, and has its own observation site about 30 miles north of Bryan in Gause. The association also publishes a monthly newsletter called Pulsar that includes information on current astronomical activities, as well as other feature articles and a list of astronomical terms.

Four times a year, the association sponsors Community Star Night at the Southwood Athletic complex. Members set up 8-, 10- and 12-inch telescopes and then stick around to point out various celestial points of interests to anyone in the community who cares to stop by and take a peek. Hazen says turnout for the quarterly event is usually good, ranging from 35 on a cloudy summer night to more than 2,000 when Halley's comet was in view. Members also help teach astronomy classes in the local junior high schools.

In addition to bringing astronomy to the Bryan/College Station community, the Asso-

While the tragedy of the recent shuttle explosion put a damper on the nation's rapidly-growing space exploration program, it did not extinguish the national fascination with the world beyond.

Man continues to strive for a better glimpse of the heavens, a better understanding of the macrocosm in which our microcosm exists.

Dr. Roger Smith, associate professor of physics, offers some insight on where the study of astronomy is headed. He says that advanced technology will soon allow astronomers to take a sharper look into space with minimal distortion.

"One of the things that's going to happen in the next few years is that the space telescope will go up, shuttle permitting," Smith explains. "That should be quite interesting because that will be the first telescope of any real consequence that's up outside the earth's atmosphere. We won't be faced with the distortion caused by the earth's atmosphere, or the pollution caused by city light sources."

Another area of development is the study of radio astronomy. Smith says astronomers are able to take measurements of celestial objects from observatories in different parts of the world at the same time. They then can combine the tapes taken from the various locations, effectively giving them a radio "telescope" the size of the earth.

"The advantage of having a telescope that big is that it gives you very good resolution," Smith explains, "so you can use the radio telescope to look at quasars and objects that are extremely far away and see what their structures are like."

Ironically, it is through this futuristic study of space that man can best explore the past.

By examining the structures of these distant objects, Smith says astronomers are learning more about the origins of the universe because the light from such distant objects was actually emitted billions of years ago.

ciation of Amateur Astronomers also offers many benefits to its members.

The club features speakers at its monthly meetings, which are open to the public. At the next meeting, on Nov. 21, Paul Torrance from the National Aeronautics and Space Administration will speak on current planetary studies at NASA.

The association also operates a library which members have free access to, and Hazen says it is in the process of compiling a video library, as well.

Doug McGregor, a graduate student in electrical engineering and association member, teaches free classes in astrophoto-

graphy to his fellow amateur astronomers.

Hazen says that club members like to have a good time, too. She says members discovered, much to their amazement, that local restaurants will deliver pizza to the A&M observatory. This fact was confirmed, she says, after their September monthly meeting, when club members had a rather untraditional pizza party on the roof of the observatory.

If you're interested in doing some star-gazing yourself and would like to join the Association of Amateur Astronomers, you can contact Laurie Hazen at 693-4151.