

A view of Saturn from the Cassini space telescope. Photo obtained from the National Aeronautics and Space Administration website.

shows can even be customized to match what the children are learning at their schools.

A new show will debut this year that deals with Egyptian culture and their knowledge of astronomy, and many of the shows incorporate ancient mythology from the Greek and Arabian cultures. Another show is offered in Spanish, and there are seasonal programs like "Follow the Drinking Gourd" in honor of Black History Month and the "Christmas Star."

In addition to the shows, visitors are treated to exhibits, arts and crafts (which are age appropriate), and games. There are star and galaxy finders, lunar charts, word scrambles, and puzzles. Visitors can use toilet paper to make a solar system model to classify planets and construct a rocket out of cardboard cylinders.

Most of these activities take place in the planetarium's lower-level classroom, which gives Becker-Ingram the ability to teach from a bulletin board and deliver her love of space tidbits and facts. On clear days, she often takes visitors outside to view celestial objects through a telescope or to do a hands-on science experiment about the cosmos.

Becker-Ingram believes a lot of visitors like the simplicity of Birmingham-Southern's planetarium. She currently has her eye on acquiring more telescopes for the building, as well as adding computerized video/DVD projections and more slide projectors, which would enable her to bring aboard animated shows. She plans to increase her efforts to get the campus and community more involved and already has integrated special evening shows for students, facultv. staff, and alumni.

"Sometimes children visit me with long faces or come in saying, 'I hate school!," says Becker-Ingram, who admits she bumped into her career in astronomy by accident. "But many times, I'll see them sit and listen and that 'light bulb' comes on. Then they leave saying that our campus is the best and that BSC is the college they would like to attend. That's what I like the most about being here."

## Stargazing tips for the beginner What to look for in the summer night sky

If you're looking for things to do as a family over the summer months (summer officially ends on Sept. 22), then welcome to Stargazing 101. But before you get started, visit a planetarium to get acquainted with the stars, constellations, and planets, and request a star map for later use. There are many books and websites available with helpful information, too. When you go outside, find your bearings. Make sure you are in a relatively dark area and there are no high buildings or tall trees around you. Sit in a lounge-type chair or lie on the ground to avoid a neck cramp.

Unless you want to look at the moon specifically, viewing is best on a clear night with no moon showing. (The full moon is bright enough to "wash out" large areas of the sky.) Equipment most often used for sky viewing is the unaided eye, standard binoculars, or a telescope.

Follow the rest of these tips for help on navigating the summer sky:

- Imagine the sky as a large dome above you. When looking up, don't expect to see everything in the sky at one time. Be patient.
- Stick with smaller binoculars. 7x50 binoculars are good for beginners. The first number on binoculars shows magnification. The higher this number is, the more difficult it is to hold the binoculars steady. The second number displays the diameter of the lenses in millimeters, which should be as large as possible to gather lots of light so you can see faint objects.
- Five planets can be seen with the unaided eye (Mercury, Venus, Mars, Saturn, and Jupiter). With binoculars, you can observe the mountains/craters on the moon, comets, and globular and open star clusters, once you've located their positions. You will need even higher magnification to view the phases of Venus, the Orion Nebula, and the rings of Saturn.
- Besides the sun and moon, there are several thousand stars visible to the unaided eye with colors that are determined by temperature. For example, Arcturus is red; Capella is yellowish; Altair, Deneb, and Vega of the Summer Triangle are blue-white (a lot hotter than
- A few of the brighter stars and constellations that are visible at Birmingham latitude include the constellations of the Little Dipper and the Big Dipper, the constellation Cassiopeia, and the three stars of the Summer Triangle, each belonging to a different constellation.
- You should be able to catch sight of several meteors during the night, though the rate does increase after midnight (light pollution from city lights will hinder your ability). Meteors, or shooting stars, are tiny rock or dust particles that burn up as they enter the Earth's atmosphere. They appear randomly as brief bright streaks across the sky, lasting a few seconds at most, moving too quickly to use binoculars. While the appearance of any particular meteor is unpredictable, there are occasionally meteor showers when you may see as many as a half-dozen or more meteors per minute. Meteor showers are when the Earth encounters leftovers from a comet. The most reliable meteor shower during the summertime is "the Perseids," which is predicted to appear after midnight on Thursday, August 12.

<sup>\*</sup>Information contributed by BSC Meyer Planetarium Director Roswitha Becker-Ingram.