

Abilene Reporter News

COLUMNISTS

At Abilene State Park, the stars at night are ...

Michael Richins Special to the Reporter-News

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Stargazing might not be the first thing that comes to mind for things to do on a cold, crisp February evening, but winter skies bring some of the most awe-inspiring viewings of the year.

A telescope or even a pair of household binoculars can be used to focus in on planets, stars, and other celestial objects. The biggest challenge is knowing when and where to look.

On Saturday, Feb. 22, Abilene State Park is hosting another monthly star party. Members of the Big Country Master Naturalists and the Big Country Astronomy Club will be there with their telescopes and green laser pointers, eager to share their knowledge and views of the night-time sky. There are usually at least six to eight telescopes sighting in on various heavenly objects for the public to see.

There is also a walkable scale model of our solar system. Beginning at the sun, you can learn about the innermost planets: Mercury, Venus, Earth and Mars; traverse the asteroid belt and journey across the field to discover more about the outer giant planets Jupiter, Saturn, Uranus and Neptune.

Viewing the actual planets from earth, however, is hit and miss because we can only see those that are on the Earth's side of the solar system. Planets that happen to be on the opposite side of the sun cannot be viewed because they are in the sky during daylight hours.

On the evening of the 22nd, Venus and Uranus can be seen (Uranus only with a telescope). If you want to see Mars and Jupiter you would have to wait until the wee hours of the morning. Saturn won't be visible at all for a couple more weeks because it is directly opposite the sun from the Earth's point of view.

Stars are plentiful to view, but even with a powerful telescope, you see little more than you can with the naked eye. This is due to their vast distance from earth. There are some stars,

however, that offer a pleasant surprise when viewed through a telescope. For example, Mizar in the Big Dipper, Rigel in Orion, and Castor in Gemini are all double or binary stars. These stars are actually two stars that are gravitationally tied and rotate around each other. With the naked eye they appear to be a single star, but through a telescope the two can be separately discerned.

One of the most awesome views in the winter sky is the Orion Nebula in the constellation Orion. A nebula is a cloud of dust and gaseous matter, ideal for the formation of stars. Gravitational forces compress the elements in the nebula until they achieve ideal mass and pressure. This results in a fusion reaction. Then a star is born. Other, lesser known nebulae in view on a February night are the Crab Nebula and the Blue Snowball Nebula. All are amazing and beautiful when viewed through a telescope.

Star Clusters are just as their name indicates: clusters of stars. They are groups of hundreds to millions of stars bound by gravity. There are two types of star clusters. One is a globular cluster, where a group of usually older stars are bound so tightly that they gather into a spherical shape. The other is an open cluster, where younger stars are relatively close together but in no order or shape. Clusters in view in February include the Pleiades star cluster which can easily be viewed with the naked eye and the Double Cluster, two open clusters so close together they can be seen in the same field of view through a telescope.

The winter sky holds an abundance of amazing and beautiful objects. If you would like to view these and more, bundle up and come join us at Abilene State Park from 6:30 to 9:30 p.m. Feb. 22. We're near the pool.

The Big Country Master Naturalists have several other events planned as well.

- ▶ At 9 a.m. Feb. 15, there will be a bird hike at Abilene State Park; we'll start with an orientation near the pool.
- ▶ At 9 a.m. Feb. 18-19, visit our Information Booth at the Farm and Ranch Wildlife Expo at the Taylor County Expo Center.
- ▶ At 9 a.m. March 7, a hike at Lake Abilene, Abilene State Park; check in first at park entrance.

Be sure to check out our local chapter on Facebook at BCTXMN for event details and updates.

This article is courtesy of the Big Country Chapter of the Texas Master Naturalists, a group of volunteers interested in all things outdoors in Texas. They are sponsored by Texas Parks and Wildlife and the Texas A & M AgriLife Extension Service.