

# Acadiana Sky

## The Acadiana Night Sky Each Season

This information is based on the appearance of the south Louisiana sky early in the evening. Use in conjunction with a star map, sky app, or sky software

for the current month. Planets are not mentioned because they change their positions against the background of distant stars.

### *Spring*

The Big Dipper is now high overhead. If you look at the second star from the end of the Dipper's handle, you'll find that there are really two stars there, very close together. A telescope reveals that the brighter one, called Mizar, is itself a double star. Remember that the two stars at the front of the bowl of the Big Dipper are called the Pointers, and that they point to the North Star (also called Polaris). The North Star marks the end of the handle of the Little Dipper, which extends to the right and above the North Star. The North Star is *not* the brightest star in the sky—indeed, not in the top 40—and the Little Dipper is so faint that it can only be seen if you are away from city lights. The Big Dipper can be used to find other constellations, too. Look at the two stars of the Big Dipper's cup that are *not* the Pointer stars, and follow these "Lion Pointers" away from the North Star to Leo, the Lion. Leo looks like a backwards question mark with a triangle behind it. Return to the Big Dipper and draw a diagonal across the cup from the star that connects the cup and handle to the Pointer farthest from the North star, and follow that line to Gemini, the Twins, a pair of bright stars in the west. Continuing the curve of the Big Dipper's handle away from the bowl will lead you to the bright star Arcturus in Boötes, the Herdsman, and extending the curve still farther takes you to Spica in Virgo, the Girl. Boötes looks like a kite, but Virgo is so faint as to be almost unnoticeable by beginning observers. Between Leo and Gemini is the faint constellation Cancer (the Crab), home of Praesepe, also called the Beehive. It's an open cluster of stars, just visible on dark nights to the unaided eye, and very nice in binoculars or a low power telescope.

## *Summer*

Summer nights are dominated by the Summer Triangle, consisting of the stars Altair in Aquila, Deneb in Cygnus, and Vega in Lyra. If you look at Vega with binoculars, you will see two other stars in the view forming a triangle with Vega; the one that appears double is Epsilon Lyrae. Look at Epsilon Lyrae with a telescope to see if you can split each pair into two stars—this is really a family of four stars orbiting together! Between the two stars at Lyra's base is M57, the Ring Nebula, a small, faint target for small telescopes. Hercules is almost overhead, containing M13, a relatively bright globular cluster. The head of Draco, the Dragon, is also well overhead—try to find the entire body of the Dragon. The faintest star in the Dragon's head is a double star, prettiest in binoculars. Use your low power eyepiece, finder, or binoculars to sweep the Milky Way from the summer Triangle to Scorpius, the Scorpion. In the south in Scorpius is the bright red star Antares, with a nice globular cluster to its right (you'll need fairly dark skies to find it, but the effort is worthwhile). The best hunting for Messier objects is in Sagittarius. If you have setting circles, check the Messier list for positions; otherwise, check a good star chart for the general areas of the objects. If neither of these are available, just sweep the region with binoculars or very low power, and you are bound to stumble over some of the objects. The Perseid meteor shower, one of the best of the year, is in mid-August.

## *Fall*

As Fall progresses, the Big Dipper gets hard to see down low along the northern horizon. North of about Tennessee, it remains visible all night every night, but here in the Deep South it can't be effectively seen in the evening from about mid-October through early February. Be sure you can find the North Star and Little Dipper without its help. Cepheus, the King, is well overhead. Use a star chart to find delta Cephei, a variable. The Milky Way is still easily observable in Cassiopeia, the Queen. Perseus and the variable star Algol are rising, while the Summer Triangle is getting low in the west. Look well up in the sky for the Great Square of Pegasus and the constellation Andromeda, the Princess. Find the second pair of stars in Andromeda away from the

Great Square and look just above them for M31, the Andromeda Galaxy (visible to the unaided eye on a good night). The Fall stars are not spectacular, but there are some interesting Messier objects to be found. Watch for the Orionid meteor shower in October and the Leonid meteor shower in mid-November.

### *Winter*

It's too bad that Winter is our coolest, cloudiest season, because these skies are some of the best. Take a look at the winter Milky Way from Cassiopeia through Perseus to Orion to see how many star clusters you can find. Don't miss the Double Cluster between Perseus and Cassiopeia. Farther from the Milky way are the Pleiades and Hyades in Taurus, the Bull, two of the best open clusters in the sky. They are best seen with low power. Observe them with binoculars, finder, and different eyepieces, then compare the view. The best constellation of Winter is Orion, the hunter. Don't miss the Orion Nebula in his sword. It's a giant cloud of gas about 30 light-years in diameter in which you can find four stars in a group called the Trapezium. If you look off to the side of the nebula in your eyepiece view, you'll see more detail. The bright blue-white star of Orion's foot is Rigel, and the bright red star of his shoulder is Betelgeuse; a line from Rigel to Betelgeuse leads you to Gemini, the Twins. Orion's belt points in one direction to the red star Aldebaran in Taurus, and points in the other direction to Sirius in Canis Major, the Larger Dog. Sirius is the brightest star in the night-time sky. The Geminid meteor shower, perhaps the year's best, is in December, and the Quadrantid meteor shower is in early January.

Don't forget that stars nearer to the North Star than the Big Dipper are visible all year round, or that at any time you can see the next season's constellations by observing a few hours before dawn. Visit the nearest planetarium often, and read magazines such as "Astronomy" or "Sky and Telescope" to find out what's happening in the sky each month. But most of all, use your telescope and *have fun!*