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Flint Hills' Night Sky

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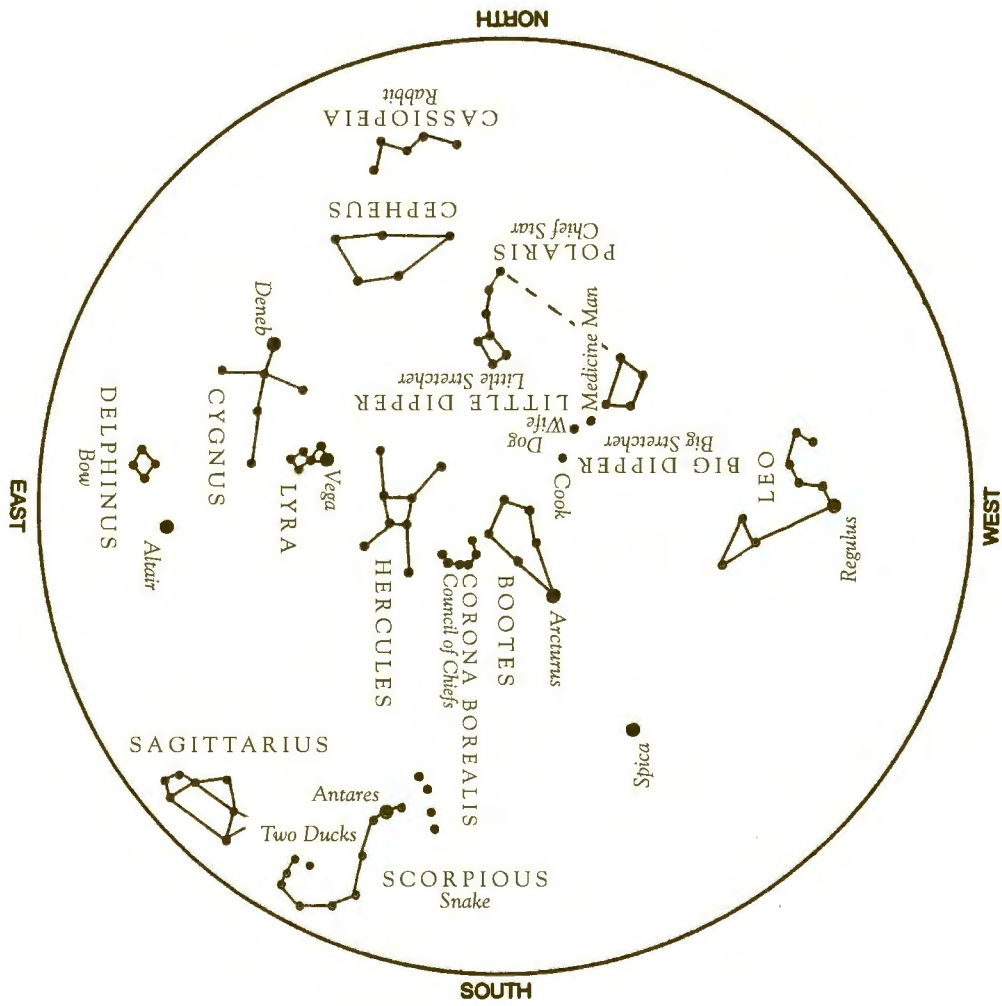
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Flint Hills Night Sky

We can still see the sky the way our ancestors and Native Americans did. It is still there, unchanged. Because of light pollution, for many people it is a whole new realm to be discovered. It is as much a part of the prairie as the land and animals and deserves just as much to be experienced. It's important to hold on to all of our heritages and the awe,



serenity, soul, and profundity of the heavens are among those heritages. There is a timelessness, a boundlessness, a breadth of imagination that can be found in no other place. While it is interesting to view the heavens as a scientist in a formal observatory setting at a university, it unites both the heavens and the earth to see them in the expanse that is the Flint Hills. It makes the one part of the other.

To Native Americans, the stars' movements helped mark the seasons, events, rituals, and important daily activities. The North Star (Polaris) was known and used as a guide. The four cardinal directions were important in culture, planning, and religion. Stars and their groupings were used as an explanation of Native American origins, an explanation of the world around them, and as a source of recreation.

One example of Plains Indian cosmology is represented by that of the Skidi (or Wolf) Band of Pawnee, called the Northern Band. (The other three bands: the Grand, Republican, and Tapage were known collectively as the Southern Band). The Skidi made sky maps and star charts. Astronomy was a major component of their religion. The sun and moon were of lesser importance while the stars and their movements were central to the Pawnee, perhaps more so than any other tribe. Even their lodges were situated according to the stars. They always opened to the east. The stars, which appeared above the smoke holes at the center of these 30- to 50-foot diameter lodges, were used to predict the seasons. The Pawnee did not use a calendar, as such, although most other tribes kept either a lunar calendar (much like the Islamic or Hijri calendar in use today) or kept track of the summer solstice (longest day of the year) as a year or season marker.

The beginning of the Pawnee ceremonial year was based on the reappearance of the Two Swimming Ducks, the two tail stars in Scorpio (Shaula & Lasath). They were below the horizon in winter. Their first appearance again signaled spring was near and the time for the birds to fly north had come again.

It was now time for the priests to look for the appearance of the Seven Brothers or Pleiades. A month before the spring equinox, in late February, the Seven Brothers crossed the central smoke hole in the lodges just after sunset. The next dawn the Council (or Circle) of Chiefs, Corona Borealis or the Northern Crown, passed over the smoke hole. It was now time to plant crops. Six months later, a month before the autumn equinox, the reverse happened: the Circle of Chiefs appeared at dusk and the Seven Brothers appeared at dawn above the smoke hole. It was now time to harvest crops. NOTE: The Seven Brothers (Pleiades)

are not visible tonight until they rise a little after 4:00 am. in the east (the Council of Chiefs will then be setting in the west).

The Council (or Circle) of Chiefs sits near the Chief Star, the North Star or Polaris, which never moves (is always there to protect his people and the other stars) and was used for fixing the cardinal directions.

Also near the Chief Star are the two Stretchers. The Little Stretcher, the four dipper stars of the Small Dipper, represents a child borne by four adults. The Big Stretcher, the four dipper stars of the Big Dipper, represents an adult being carried. He is followed by a medicine man, his wife (with her dog) and a cook/errand man (these are the handle stars of the Big Dipper: Alioth, Mizor (with Alcor) and Alkaid.

Just above the north horizon is the Rabbit, or Cassiopeia, shaped like a "W". The sitting rabbit is viewed from behind: the two legs of the "W" are his two legs and the middle star is his cottontail.

In the south is the Snake (Scorpio without the two end stars - the Two Swimming Ducks – and without the pincer stars at its other end).

Just north of east and just above the horizon at 10:00 tonight is the Bow (Delphinus).

Since the stars were visible to all tribes of Native Americans, there are other names for these groupings. You might like to find some of them.

RELATED WEBSITES:

The Pawnee homepage:
www.pawneenation.org

Pawnee Indian Village State Historic Site, Republic, KS: www.kshs.org/places/pawnvill.htm

Kaw Mission Historic Site, Council Grove, KS: kawmission@kshs.org

David Clark served as chair of the music department of Kansas Wesleyan University and co-taught astronomy there. He was a co-founder of the Salina Astronomy Club. Dave recently retired as personnel manager of the Kansas City Symphony. He remains active as a trumpet player.





NOTES



We lie on the earth;
to keep from falling into the stars we reach
as wide as we can and hold onto the grass.

William Stafford