

Milk Dipper Is Prominent This Month in Skies

By Robert H. Baker
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URBANA, Ill., Aug. 2 (AP)—The Milk Dipper is an interesting sight in the southern sky in the evening during August. It is exactly south at 10 p. m. standard time on Aug. 1 and at 9 o'clock by the middle of the month.

Look for an inverted dipper formed by six stars about one-fourth of the way up from the horizon for observers in the latitude of New York. The Milk Dipper is so called because it lies in the Milky Way—in fact, in the very brightest part of it. These stars are in the constellation Sagittarius, the Archer, one of the 12 constellations of the zodiac along which the sun seems to move annually.

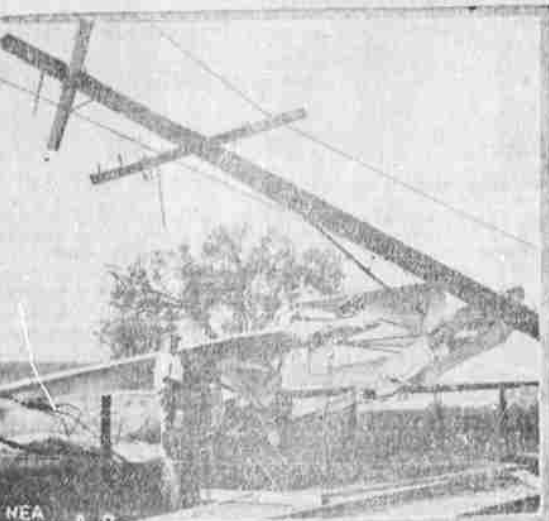
The full moon on Aug. 1 will make the view of this region less attractive than it will be a few evenings later when the moon is out of the way.

The location of the Milk Dipper gives the bearings for finding our way in the vast aggregation of stars we call the stellar system. The center is 65,000 light years in this direction; the edge of the system is 100,000 light years beyond the center. The opposite edge is hidden and nearest us is 25,000 light years away. The figures are approximate.

A light year is six trillion miles; it is the distance light travels in one year at the rate of 186,200 miles a second. A ray of light requires 200,000 years to cross our stellar system. No one can ever make the trip in a shorter time, because the speed of light is the fastest possible speed of anything.

This great system of stars of which our sun is a member encloses the spiral nebulae which powerful telescopes show dimly and whose distances are reckoned in millions of light years. Many astronomers believe that our stellar

HERE'S LUCK TO A BROWN TURN



When a plane hits an obstruction in taking off, and then pulls down a mile of power lines and wires, the aviator usually is killed, but here's Pilot Joe Brown smiling blithely and unhurt after his plane did just this little stunt at Arcadia, Cal.

system is just one of these flat spiral galaxies which all together constitute the vast scheme of the visible universe.

Spiral nebulae have central starry cores, from opposite sides of which two arms spiral outward. These arms are formed by great knots of stars.

The sun is not situated in the core of any great spiral. It is far out on one of the arms and nearly in the middle of one of the knots. This particular knot, which astronomers call the local cluster, is an unusually large; it is 20,000 light years across and contains perhaps as many as 100 million stars.

The Milk Dipper directs the eye toward the center of our system. In the Milky Way in its vicinity is

made up of knots of stars similar to the local cluster. This one would blend into the Milky Way in an observer who there where the dipper appears to be. The confusion is inevitable. We live in the Milky Way.

A British official, criticizing America's proposed to outlaw war, submitted that "the United States goes on increasing the size of her navy." More arguments, of course, and armaments.

About 12,000 airplanes will be made in the United States during 1928, a magazine writer estimates. Still there are a number of people in this country who prefer to fly off the handle.

Height, Barrenness and Bitter Cold Make Antarctic a Land of the Dead

EDITOR'S NOTE: This is the third of a series of stories on forthcoming expeditions of exploration into the Antarctic.

By John L. Couley
(Associated Press Science Editor)
(Copyright, 1928, Associated Press)
NEW YORK (AP)—A barren continent of ice, crissed in places by high mountain ranges, except by the severest gales and frozen by the coldest weather on the earth—such is Antarctica, the forbidding land to which Count Richard E. Byrd, Capt. Sir Hubert Wilkins and Thomas George Jeffery are taking their planes for circumnavigation by air.

This south polar waste, known so imperfectly that even its coast lines cannot be accurately mapped, before striking contrasts to the more familiar Arctic regions. In the first place, of course, it is a land, and although its terrain is all but completely buried under an ice blanket, the mountainousness of the mass is now generally accepted.

In the Arctic, as everyone knows, there are many sizeable islands, and the northern ocean dominates the top of the world.

Almost No Life
Birds and animals are fairly plentiful in the northern Antarctic, but on the other hand, some birds are on the edge of extinction, and cliffs along the coast are rich in seals, sea elephants, penguins and other polar fauna.

There are flowering plants in the Arctic, too—four hundred species of them; but in only one spot on Antarctica has this advanced vegetation been reported, although sev-

eral varieties of moss are found. The Arctic summer is comparatively mild, whereas the mean Antarctic temperature for December and January, the warmest months in that part of the world, is nearly always below freezing.

Vegetable, animal and bird life is rather abundant on nearby islands, but the three exploring parties will not concern themselves with these more friendly neighbors of the bar white continent. Their work will be done in a land that is still in the grip of an ice age of comparatively recent origin, a land that died ages ago.

Once Alive
There is plenty of evidence, however, that Antarctica was once a living continent. Important fossil flora indicate the presence of vegetable life, at least, before the coming of the ice and some scientists have suggested that mammoth plants and animals began their northward migration from West Antarctica, the section yielding these remains, in the forgotten time that was the heyday of south polar prosperity.

For purposes of convenience, geographers sometimes divide the continent into two parts—East Antarctica, which is apparently a plateau of the Indo-African type, and West Antarctica, which is folded in ridges. The structure of the latter section suggests that the mountains found there may be a continuation of the Andes for the peninsula of West Antarctica extends to within 200 miles of the tip of South America and the rock formations of that continent may extend beneath the sea to emerge again in the course of Antarctica.

Ice-Hidden Land
The southern continent is an ice-ridden plateau whose average elevation has been estimated at about 7,000 feet. It is highest near the South Pole, where the mountains tower to a reported height of 15,000 feet. The pole itself is about 10,000 feet above sea level.

Many of these divisions are named for the explorers who first sighted them—Wilkes Land, Kemp Land, Enderby Land, Coats Land, Graham Land, others honor European monarchs, living and dead—King Edward VII Land, King George V Land, Queen Mary Land, Kaiser Wilhelm II Land. But none of the semi-mythical provinces has boundaries. Antarctica is still too much of a geographical enigma to warrant such familiarities by the map-makers.

In 15 Kansas counties the wheat yield is expected to run 15,000 bushels above that of last year. Several boards of trade are reported as anxious to relieve the farmers of some of it without any charge.

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