

The Katharine Ordway Natural History Study Area

Box 216 Inver Grove Heights, Minn. 55075 (612) 455-6204

ORDWAY BULLETIN
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MACALESTER COLLEGE

located at 9550 Inver Grove Trail (Dakota County Road 77), Inver Grove Heights, Minn.

## The SUN OSCILLATES at ORDWAY.

A month or so ago the sun was rising at 05:26 (daylight time) and that is the earliest sunrise of the year for that is the time of the summer solstice, when the sun comes nearest to being directly overhead at noontime. From here on the season will decline, i.e. the sun will retract its rays southward for another half-year taking with it a few minutes of daylight each day.

On the day of the winter solstice - a little more than six months ago - I took a good look at the rising sun (it was 07:47 standard time) and observed that it was coming up - a lovely clear day it was. too - to the southeast at its furthest southerly movement of the year. Its fiery orb made its appearance just one finger's width to the left (i.e. the east) of the plume of steam rising from the nuclear-powered power plant at Prairie Island, about 19 crowflight miles away.

Now, on June 21st, the summer solstice finds the rising sun making its appearance far to the left of the Norway maple which stands on the east side of the building — an angular traverse of close to 90 degrees. This is the day when one is most likely to become sunstruck since the angle of incidence of the sun's rays is most nearly perpendicular and thus the actinic effect of the sunlight is at its greatest, regardless of the air temperature. So, it can be — and often is — a day of delightful weather but the clear skies can be hardest on an unshielded anatomy.

It is interesting to take such a bearing on the newly-risen sun each day - dependent, of course, on the weather conditions - and to trace the advance and retrogression of the seasons by the oscillation of the sun.

R J CHRISTMAN,

Naturalist

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