



THE ATMOSPHERIC RESERVOIR

Examining the Atmosphere and Atmospheric Resource Management

"Weather Beacons"

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Much like drive-in movie theaters, many weather beacons across America have been dismantled or are no longer in service. Only about half of the original beacons are still operating and Bismarck-Mandan residents began fighting to keep the Provident Life Weather Beacon shining back in 1997. Fundraising by KFYP Radio saved the beacon and it was reconditioned with a new lighting system. Since 2002, it has once again served as a landmark and piece of local history in addition to displaying weather forecasts.

Before the Internet and television were commonplace, radio and newspapers were the primary sources for weather information. In 1941, Douglas Leigh had aspirations of making the Empire State Building in New York City an operating weather beacon by changing its lighting scheme; however, U.S. involvement in World War II placed his idea on hold. After the war, Leigh took his idea to Minneapolis and constructed the very first advertising weather beacon on Northwestern National Bank. This became known as the "weatherball" because of its spherical shape atop a tower on the roof of the bank building. Numerous other weather beacons were soon constructed across the nation. The Provident Life Weather Beacon began operating in 1954.



Provident Life Weather Beacon

Weather Beacon **white**
as snow, down the
temperature will go.

Weather Beacon **red** as fire,
temperature is going higher.

Weather Beacon an
emerald **green**, forecast
says no change foreseen.

When colors **blink** in
agitation, there's going
to be precipitation.

Because radio and news stations typically use the most current National Weather Service (NWS) forecast information to update weather beacons, they are more than just a novelty and are normally representative of the general weather conditions that occur. The typical forecast period for weather beacons (and this is true of the Provident Life Beacon) is 12 hours. Because weather conditions can change very rapidly in short periods of time, a 12-hour trend is used to depict the larger and more prolonged conditions that should exist.

KFYP Radio operates the Provident Life Weather Beacon and there are six selectable buttons, each corresponding to a specific color and whether or not precipitation is expected. In case you haven't heard the rhyme or "code" for the beacon, it is included in the color-coded graphic.

Other interesting facts about the Provident Life Weather Beacon: there are three different sets of fluorescent tubes (90 tubes total) inside a plastic face that make up the eight-foot beacon section; the beacon's tower stands 60 feet high atop the 77-foot building; and the tower is actually a hollow steel tube that workers can climb through to perform maintenance.

With the proliferation of weather information through the Internet and smartphones and because maintenance and electricity to operate weather beacons are a significant expense, many communities have already phased out their use. A fire ravaged the Northwestern National Bank Building in Minneapolis on Thanksgiving Day of 1982 and the weatherball was permanently removed from the city skyline. North Dakota is fortunate to still have a working piece of history, shining brightly over its capital city.

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