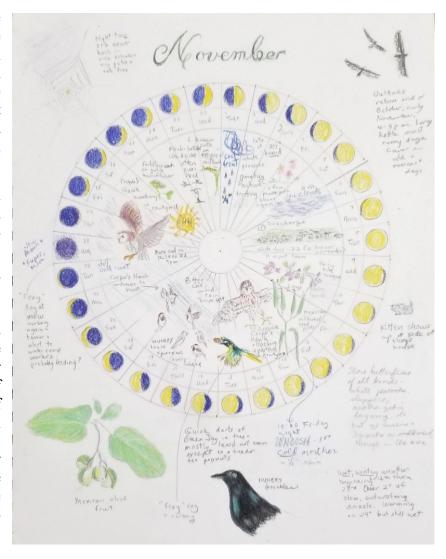
Nature's Calendar

- Are you a phenologist?

Article & photos by Lisa Kay Adam, South Texas Border Chapter

Do you know which tree usually blooms earliest in the Rio Grande Valley? Which months monarchs often migrate through? Or when the pink evening primrose might first be found along a roadway each year? If so, you are a great phenologist.

As the National Phenology Network explains, phenology is simply "nature's calendar," the study of when cyclical and seasonal natural events occur in a particular location. Always a fascinating study, phenology's importance is growing because of climate change. Seasonal and weather changes may throw out of sync the timing of interdependent species, such as the migration of butterflies and the flourishing of their host plants, or the emergence caterpillars of and breeding season of birds who feed them to their young.



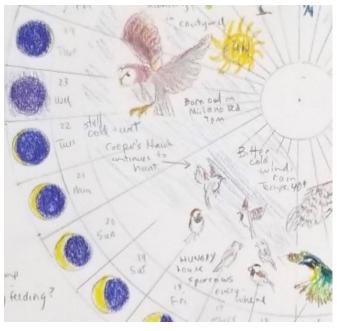
A phenology wheel is useful for recording observations in nature

I am *not* a great phenologist. I think I know when things happen, but it turns out I have only a vague notion. However, I've been keeping better track recently through a *phenology wheel*. The basis of the wheel is a large circle divided by spokes into labeled segments; these can represent the days or weeks of the months, the months of the year, or the seasons of the year. Within those segments, the creator draws, doodles, or paints small images of natural observations and/or makes written notes. Examples might be the appearance of wildlife, the budding or blooming of plants, the cycles of the moon or astronomical observations, weather data, and anything else of personal interest. I also note observations in my garden. As a cultivated space, a garden isn't a traditional subject for phenology, but since I garden for wildlife, it's useful for me.

As far as I can tell, the phenology wheel is a recent innovation. But it surely must have kinship with both ancient and modern forms of recording chronological observations in a circular shape.

Examples might range from the famous Aztec "calendar" stone or *Piedra del Sol*, to the text-based *Desert Flowers* by contemporary artist Richard Long. The circular form is a perfect way to embody time's cyclical passage and nature's rhythms, and a completed wheel is not unlike a mandala.

I find making a wheel is a lower-pressure alternative to a nature journal. I like to be creative, but the "blank page syndrome" in writing that Anita Westervelt recently talked about applies equally to making art and journaling. The wheel's form gets me started. I haven't completed a full year of phenology wheels yet, but I'm already looking forward to comparing my observations to the next year.



Author's varied observations and notes for November

But using a wheel is only one way to participate in phenology. As mentioned before, the National Phenology Network is a citizen science project. I've noticed, however, that they don't track many of the plants native to our area. Much closer to home, John Brush, in his blog for the Center of Urban Ecology at Quinta Mazatlan, describes two phenology databases he has created in iNaturalist for the Rio Grande Valley: one for blooming plants and one for fruiting plants. Contributing to either of these networks adds important data to the scientific study of phenology.

My phenology wheels are purely for personal pleasure, but they are making me a better observer of natural phenomenon, and they only increase my awe and wonder at the complexity of nature.

Sources:

- USA National Phenology Network, https://www.usanpn.org
- Desert Flowers by Richard Long, http://www.richardlong.org/Textworks/2021textworks/DESERT_FLOWERS.htm
- Center for Urban Ecology, https://cuefornature.wordpress.com/2023/01/10/how-to-explore-inaturalist-plant-phenology-information/