The Signs of July

at the

Community Nature Center
of Prescott

Cumulonimbus

1980 Williamson Valley Road
Prescott. AZ

Welcome to the Community Nature Center! We hope you'll enjoy observing & contemplating the many wonders of this natural area. New guides are available each month; we invite you to return again!

To help us preserve this special place, **please stay on the trails & leave plants *and* animals undisturbed.** Remember, footprints made on the fragile grassland, woodlands & trailside do not heal quickly in our dry Highlands! **Also keep dogs leashed and please pick up pet waste.**

HAVE YOU SEEN …

… or have you HEARD the first rattling of the **cicadas?** The sustained chorus of male cicadas is pleasant and familiar to most of us; it is a sound of summer. To produce the sound, the insects muscles vibrate complex drum-like sound organs.

Young **cicada nymphs** spend their developmental period in the ground. They eventually dig their way out and climb onto plants where the adult form emerges from its last "skin," the exoskeleton. You might find these shells during summer months.

Cicada adult

The adults do suck sap from the limbs and twigs of trees, and the young from their roots. However, neither has much affect on the tree. In addition to providing summer "music," cicadas are an excellent food source for many birds and some mammals.

… that the **warm-season grasses** of our little "grassland" are beginning to green up? Just wait -- after several summer rains, these grasses and a wide variety of perennials will really come alive, making late August and September two of the most lovely months of the year for the Nature Center's flora.

Grama grass is easily damaged by repeated human foot traffic. **Please stay on the trails** to help protect our little grassland!

Blue Grama grass in flower

HAVE YOU SEEN …

Fleabane Daisy & Acmon Blue Butterfly

…the diminutive white flowers of the **Fleabane Daisy**? This plant is a member of the Sunflower or Composite family; the fleabane daisy is actually a **composite** of many tiny flowers. Look carefully -- each narrow white ray is an individual flower, as is each little yellow circle of the central disk. Clustering hundreds of tiny flowers into one large "flower" works well to attract pollinators, and assures production of a lot of seed. Bigger sunflowers have the same basic design. This is the largest plant family on earth, so the strategy obviously works!

Butterflies love sunny landing platforms. Sunflowers, whether small or large, are perfect for this. Many also have disk and ray flowers of contrasting colors. This is obvious to an insect's eye. The fleabanes attract some of our very small butterflies, like the Blues.

On a sunny morning watch for these and other small **butterflies,** landing and sipping with their long soda-straw mouthparts. Other insects will come along too!

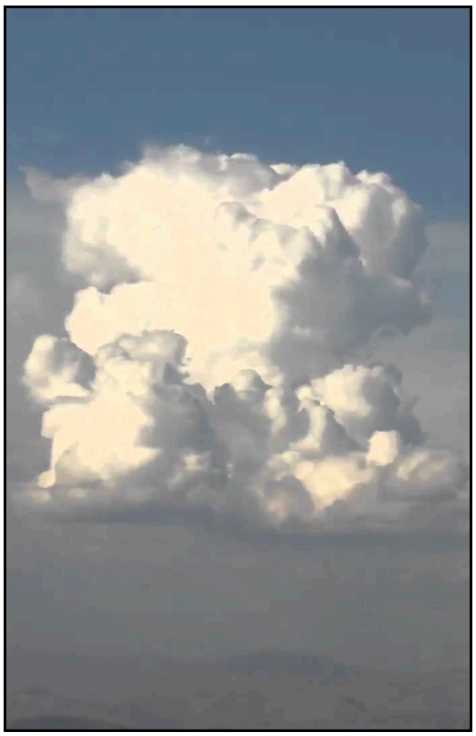
… the beautiful yellow pea-like flowers of **Wright's Deervetch?** Common throughout the "grassland" areas of the Nature Center, these pretty plants bloom after spring flowers have faded and others are waiting for our summer rains. Find a shady spot, sit and observe these plants for a while. What potential pollinators are visiting these flowers?

This plant is a member of the **pea family**; you probably recognize the shape of the flower. The lower lip acts as a landing platform for pollinators. Only those of suitable size and weight gain easy entry to the flower through this "door."

Wright's Deervetch

HAVE YOU SEEN …

… any **cumulonimbus** (thunderhead clouds) building? Besides providing us beautiful displays, the lightning that is produced in summer storms is one way that free atmospheric nitrogen can be "fixed." Nitrogen is an essential constituent of protein, which is a building block of all living material. It also comprises 79% of the atmosphere, but in its gaseous state, it is unavailable for use by most forms of life. That is where lightning comes in; it provides the high energy necessary to combine nitrogen with oxygen and hydrogen forming the ammonia and nitrate that fall to earth in rainwater. These forms can be utilized by living systems. Certain bacteria and blue-green algae also make nitrogen available.



Cumulonimbus

So, just watch how much plants respond to these rains! Now you know why.

CITY OF PRESCOTT
Everybody's Hometown

For more information on the City of Prescott's Open Space and trails go to http://cityofprescott.net/services/parks/parks.

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Updated in July 2013 from original **Signs of the Month** written in 1993 by Nichole Trushell for the Community Nature Center of Prescott. Photos with permission, or by Nichole Trushell or Steve Morgan.