

MONSOONS

By Carol Godwin, Cycle Mania

Water, water everywhere...and plenty of drops to drink, grow green grass and fill tanks

Monsoon season has always been a time I look forward to, anticipate and feel cheated without. The past few years have been especially lacking in that area, so this year has been one to celebrate. The hot humid mornings, rapid building up of towering cumulus clouds and finally the cool downdraft of pre-storm winds define a summer day during monsoon season. When the storm cell finally opens up and releases all that pent up energy, the resulting lightning show and torrential downpours with or without hail, are as dramatic and exciting a show as you will ever see. Arizona monsoon season brings thunderstorms, and officially starts on June 15 and ends on Sept 30, but any resident of our state knows that they almost never start until the first or second week of July. The actual monsoon season begins when a weather pattern sets up where there are 3 consecutive days with a dewpoint of 54° or above.

The two things that I enjoy most about monsoons, the awesome lightning shows with their resulting rolling thunder claps as well as the torrential downpours, also bring dangers to be aware of. Lightning kills an average of 47 people a year in the US and definitely deserves our respect and caution. During monsoon season, it is wise to assume that there will be a storm on any given day and in any area so be aware of approaching storms, be prepared with raingear and be ready to head for cover as storms approach. Monsoon storms build and move quickly, so being alert to lightning strike movement is essential. You can keep track of lightning activity by paying attention to the changing time-lag between lightning strikes and thunder claps or using a lightning strike app. Lightning can easily strike within 10 miles of a storm cell so if you hear a less than 30 second lag between lightning and thunder, you need to take precautions. Arizona experiences over 500,000 lightning strikes a year, mostly during monsoon season. In general, if you can hear thunder, it is time to begin heading for cover, either moving back towards your home or vehicle or making plans for finding a safer area in the outdoors if getting back is not possible. Hiding under a tall tree is definitely not recommended; if you get caught out under a storm, you should crouch on the ground preferably under brushy vegetation with feet spread apart in a lower lying area. If you are in a group, group members should spread apart from each other to prevent the a strike from traveling between people. Being in a lower lying area is a double edged sword though, as the accompanying torrential downpours quickly fill drainages and can cause flash flooding. Flash floods rank at the top of storm-related deaths each year, and flash flooding can occur in an area miles downstream from the actual storm so it is important to keep aware of your surroundings and move out of drainages during storm season. That quaint campsite under the trees at the edge of a low-lying meadow can quickly turn into waterfront property, so choose campsites carefully. It is wise to think about what you

would do in the area you are traveling through if you are caught out in a storm and pack raingear and emergency survival equipment, including fire starter and food, with you if you are venturing out during monsoon season. Hypothermia can occur anytime your body temperature drops to lower than 95°, which can happen if you are drenched in a downpour including hail, and actually occurs more often in summer than in the winter.

The monsoon rains initiate a riot of new growth in the White Mountains. Grass greens up seemingly overnight, trees are washed clean and look more vibrant, wildflowers spring into action and advertise their presence in a blanket of vibrant colors. Mushrooms seem to appear full grown apparently overnight and herbivorous animals can relax and enjoy the bounty of fresh green growth. Elk and deer have recently calved/fawned and the fresh growth allows them to both build up body fat for winter stores and feed their young, and the new arrivals can begin supplementing their diets with the fresh growth. Previously dry or low tanks, natural marshy areas and waterways fill and provide fresh habitat for amphibious wildlife and birds, with a symphony of toads and frogs croaking at night and birds singing during the day. Some spadefoot toads have literally waited years to come out from their underground burrows to lay eggs, which metamorphosize into tadpoles and then froglets within 2 weeks.

Lastly, monsoonal moisture obviously causes saturated soil conditions and as most trails are at least somewhat lower than their surroundings, they can fill with runoff water and become unusably wet. Traveling on wet trails not only deepens the trail, compounding the runoff problem, but also damages and roughens the trail surface for later users and actually delays proper use because the trails take longer to dry. Although pictures of muddy boots and tires or videos of splashing through mud and water-filled trails are often posted on social media as evidence of all the fun somebody had, in actuality, these pictures make responsible trail users cringe and trail stewards sigh, knowing that there is a lot of work that will be needed to be done after the trails dry in order to get them back into usable shape. Please remember the rule- if you are making impression tracks on a trail, or are slipping and sliding around muddy corners, then it's too wet to responsibly hike, ride or drive on. Respect other users and stay off...please. You can still get out and enjoy the outdoors, but enjoy responsibly: wander at a slower pace through the forest staying on pine needle strewn ground, make use of rocky areas to get across wet meadows and take time to enjoy the diversity of flora that the monsoons bring out.

Happy monsooning! 2021 has been a record year in most areas and the water in tanks, waterways and low lying areas will help renew the forest for months to come.