

= Wet season =

The rainy season , or monsoon season , is the time of year when most of a region 's average annual rainfall occurs . It usually lasts one or more months . The term " green season " is also sometimes used as a euphemism by tourist authorities . Areas with wet seasons are dispersed across portions of the tropics and subtropics .

Under the Köppen climate classification , for tropical climates , a wet season month is defined as a month where average precipitation is 60 millimetres ( 2 @.@ 4 in ) or more . In contrast to areas with savanna climates and monsoon regimes , Mediterranean climates have wet winters and dry summers . Dry and rainy months are characteristic of tropical seasonal forests : in contrast to tropical rainforests , which do not have dry or wet seasons , since their rainfall is equally distributed throughout the year . Some areas with pronounced rainy seasons will see a break in rainfall mid @-@ season , when the intertropical convergence zone or monsoon trough moves to higher latitudes in the middle of the warm season .

When the wet season occurs during a warm season , or summer , precipitation falls mainly during the late afternoon and early evening . In the wet season , air quality improves , fresh water quality improves , and vegetation grows substantially , leading to crop yields late in the season . Rivers overflow their banks , and some animals retreat to higher ground . Soil nutrients diminish and erosion increases . The incidence of malaria increases in areas where the rainy season coincides with high temperatures , particularly in tropical areas . Some animals have adaptation and survival strategies for the wet season . Often , the previous dry season leads to food shortages in the wet season , as the crops have yet to mature .

= = Character of the rainfall = =

In areas where the heavy rainfall is associated with a wind shift , the wet season is known as the monsoon . Rainfall in the wet season is mainly due to daytime heating which leads to diurnal thunderstorm activity within a pre @-@ existing moist airmass , so the rain mainly falls in late afternoon and early evening in savannah and monsoon regions . Further , much of the total rainfall each day occurs in the first minutes of the downpour , before the storms mature into their stratiform stage . Most places have only one wet season , but areas of the tropics can have two wet seasons , because the monsoon trough , or Intertropical Convergence Zone , can pass over locations in the tropics twice per year . However , since rain forests have rainfall spread evenly through the year , they do not have a wet season .

It is different for places with a Mediterranean climate . In the western United States , during the cold season from September ? May , extratropical cyclones from the Pacific Ocean move inland into the region due to a southward migration of the jet stream during the cold season . This shift in the jet stream brings much of the annual precipitation to the region , and sometimes also brings heavy rain and strong low pressure systems . The peninsula of Italy has weather very similar to the western United States in this regard .

= = Areas affected = =

Areas with a savanna climate in Sub @-@ Saharan Africa , such as Ghana , Burkina Faso , Darfur , Eritrea , Ethiopia , and Botswana have a distinct rainy season . Also within the savanna climate regime , Florida and South Texas have a rainy season . Monsoon regions include Southeast Asia ( including Indonesia and Philippines ) , northern sections of Australia 's North , Polynesia , Central America , western and southern Mexico , the Desert Southwest of the United States , southern Guyana , portions of northeast Brazil .

Northern Guyana has two wet seasons : one in early spring and the other in early winter . In western Africa , there are two rainy seasons across southern sections , but only one across the north . Within the Mediterranean climate regime , the west coast of the United States and the Mediterranean coastline of Italy , Greece , and Turkey experience a wet season in the winter months

. Similarly , the wet season in the Negev desert of Israel extends from October through May . At the boundary between the Mediterranean and monsoon climates lies the Sonoran desert , which receives the two rainy seasons associated with each climate regime .

The wet season is known by many different local names throughout the world . For example , in Mexico it is known as " storm season " . Different names are given to the various short " seasons " of the year by the Aboriginal tribes of Northern Australia : the wet season typically experienced there from December to March is called Gudjewg . The precise meaning of the word is fairly disputable , although it is widely accepted to relate to the severe thunderstorms , flooding , and abundant vegetation growth commonly experienced at this time .

= = Effects = =

In tropical areas , when the monsoon arrives , high daytime high temperatures drop and overnight low temperatures increase . During the wet season , a combination of heavy rainfall and , in some places such as Hong Kong , an onshore wind , improve air quality . In Brazil , the wet season is correlated with weaker trade winds off the ocean . The pH level of water becomes more balanced due to the charging of local aquifers during the wet season . Water also softens , as the concentration of dissolved materials reduces during the rainy season . Erosion is also increased during rainy periods . Arroyos that are dry at other times of the year fill with runoff , in some cases with water as deep as 10 feet ( 3 @. @ 0 m ) . Leaching of soils during periods of heavy rainfall depletes nutrients . The higher runoff from land masses affects nearby ocean areas , which are more stratified , or less mixed , due to stronger surface currents forced by the heavy rainfall runoff .

= = = Floods = = =

High rainfall can cause widespread flooding , which can lead to landslides and mudflows in mountainous areas . Such floods cause rivers to burst their banks and submerge homes . The Ghaggar @-@ Hakra River , which only flows during India 's monsoon season , can flood and severely damage local crops . Floods can be exacerbated by fires during the previous dry season , which cause soils which are sandy or composed of loam to become hydrophobic , or water repellent . In various ways governments may help people deal with wet season floods . Flood plain mapping identifies which areas are more prone to flooding . Instructions on controlling erosion through outreach are also provided by telephone or the internet .

= = Life adaptations = =

= = = Humans = = =

The wet season is the main period of vegetation growth within the Savanna climate regime . However , this also means that wet season is a time for food shortages before crops reach their full maturity . This causes seasonal weight changes for people in developing countries , with a drop occurring during the wet season until the time of the first harvest , when weights rebound . Malaria incidence increases during periods of high temperature and heavy rainfall .

= = = Animals = = =

Cows calve , or give birth , at the beginning of the wet season . The onset of the rainy season signals the departure of the Monarch butterfly from Mexico . Tropical species of butterflies show larger dot markings on their wings to fend off possible predators and are more active during the wet season than the dry season . Within the tropics and warmer areas of the subtropics , decreased salinity of near shore wetlands due to the rains causes an increase in crocodile nesting . Other species , such as the arroyo toad , spawn within the couple of months after the seasonal rains .

Armadillos and rattlesnakes seek higher ground .