

The flowers that bloom in the spring...

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Trilliums, anemones, spring-beauties, and violets carpeting the forest floor—these and many more are part of nature's yearly spectacle of spring flowering. After a long cold winter these delicate blossoms announce the resurgence of life.

This sudden burst of flowering is familiar to many people but few ask why so many flowers bloom at this time. Return to the woodland in summer and you will find precious few flowers on the dark forest floor. By fall the asters and goldenrods are blooming, but their numbers are mostly in open fields and pasture.

To understand the phenomenon of spring flowering we should observe a native prairie. Here, surprisingly, springtime does not produce a dramatic floral display. But if we return to the prairie in summer, we will find a continuing pageant of flowers that continues into the early fall. The difference in flowering tempo of forest and prairie gives us a clue to why our spring woodlands offer such a spectacle.

If we examine the forest floor in summer, under a canopy of leaves, we find few of the little plants that bore the blooms of spring. Most completed their life cycle in that brief period between the time of killing frosts and the time when the trees have fully expanded their leaves. Only during this

period do these plants have access to the warmer temperatures and energy-giving sunlight necessary for them to carry on their life processes fully. In summer the leafy canopy of the forest intercepts the sunshine—that is why so many of these smaller plants must live their lives quickly in spring. The plants of the prairie have no such canopy spread over them. The radiant sun is theirs throughout the summer and they can pace their lives accordingly.

The forest of trees whose broad leaves are shed each winter and replaced each spring is our setting for the pageantry of spring flowering. Nature provides similar displays in other settings too, for different reasons. Desert areas after seasonally heavy rains can produce a landscape covered with flowers. A desert "springtime" is dependent on rain that is none too reliable, and often there are years with little or no flowering. Another of nature's settings in which spring flowering is both predictable and spectacular is found in those areas with a Mediterranean climate. The Mediterranean area has a dry hot summer and fall, a winter that is cool and wet, and a spring that brings warmer weather and the end of the rains. Summer and fall are too dry for growth and flowering, while winter is too cold. Under these conditions plants have little choice, and almost everything that blooms can be found blooming in springtime.

Some of the flowers most characteristic of our early spring gardens came from

the Mediterranean region. The crocus, tulip, hyacinth, and daffodil all come to us from that part of the world. Like many of the plants of our forest, they flower quickly by storing food in underground bulbs, roots, or other organs. The embryonic flowers and the food energy necessary for rapid growth were developed in the previous year. This explains how these plants can grow and flower so quickly.

A number of areas in the world have a Mediterranean climate and are famous for their wild flowers. Of these, South Africa and western Australia have the richest diversity. In western Australia during late September and early October (their springtime down under) you can go on bus tours devoted entirely to seeing the wild flowers. I believe there are no other tours like these in the world—seeing wild flowers for seven days. That's right—



there are so many wild flowers of so many kinds that these bus tours need a whole week to sample the variety. But the display doesn't last long. Soon the weather is hot and dry, the vegetation is withered, and tour buses head for the sea shore.

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