

such an extent that the health and vigour of the turf are seriously impaired. Once this happens, weeds such as the dandelion, catsear, and rib-grass, which are more tenacious than grass and by virtue of their deeper rooting systems more able to withstand the effects of droughts, obtain a foothold to the even greater detriment of the grass. In such circumstances lawns should be watered as regularly and systematically as possible. One good soaking is worth a dozen sprinklings. Though it may be pleasant of a summer evening to stand with the garden hose and spray water right and left over the garden, such performances do little permanent good and may even prove harmful. The moistening of the surface causes surface rooting and, as such moisture is readily dissipated by wind and sun, the plants suffer more readily than they would if the feeding roots were at a lower level, where moisture is available more constantly. Therefore, when watering is necessary one area at a time should be treated until the soil is reasonably well saturated.

It is most difficult for water to penetrate a surface which has been allowed to become hard and baked. Too frequently it will gravitate to the lower places and form sheets of shallow water on the lawn or flow off on to pathways and borders. In such circumstances the lawn should be pierced with a garden fork to allow a greater penetration of both air and moisture. Soil air as well as soil moisture is necessary for the well-being of grass and of most plants. For maintaining large areas of lawn in good order special turf aeration devices are available. The prongs of a garden fork driven 3 or 4 in. into the surface serve the same purpose. The work is much more laborious and takes much longer than when done with a machine, but if properly carried out, it plays an important part in preserving a lawn in good condition and saving it from permanent injury. To carry out the work systematically it is a good plan to divide the lawn into 3ft. strips. Doing a strip at a time, piercing the soil at intervals of 3 or 4 in., ensures that the whole surface receives adequate treatment.

Herbaceous Borders

Perhaps no garden plants show the ill effects of hot and dry weather more quickly than many of the herbaceous perennials, and the remarks about watering lawns apply with equal force to flower borders and beds. However, overhead watering does damage flowers in that the weight of the moisture on stems, foliage, and flowers frequently causes them to flop over, and if they are not securely supported, it is difficult to remedy the fault.

Where possible, beds and borders are better watered by small irrigating channels than by overhead sprinkling. Shallow channels may be made with a draw hoe, and water flowing along the channels readily percolates through the soil for a considerable distance. Given a good supply of water, a considerable area can be well soaked in a comparatively short time by regulating the flow in the channels.

After heavy rain or frequent overhead waterings the surface soil tends to compact and form a crust. The soil should be kept stirred with a hoe or



Staking is part of the attention required by dahlias at this time of year. The stakes should be a few inches shorter than the plants when fully grown so that they cannot be seen later in the season.

fork to keep it loose and friable. Such work is sometimes referred to as dry mulching because keeping the surface in a flocculent state conserves the moisture in the soil.

Perennial Asters

Many of the perennial asters (Michaelmas daisies) are subject to attacks of mildew at this season of the year, and unless it is controlled at once mildew will spread at an alarming rate and in some cases ruin an otherwise promising display of bloom. As a preventive, the bushes should be sprayed at least twice or thrice with lime sulphur.

Dahlias

Dahlias are now making strong growth and will require staking, watering, and disbudding. Miniature flowered varieties, such as Bishop of Llandaff, Little Diamond, Baldré, Dreamthorpe, and others used for bedding and general display need not be disbudded, but the large flowered kinds are better so treated. The usual practice is to select the largest and

best-developed flower bud and to remove those immediately surrounding and below it.

Dahlias, like most plants, are subject to diseases and pests. Of the diseases, probably the worst is the virus disease, which causes a yellowish mottling of the leaves, giving the plant a debilitated appearance. Unfortunately, there is no cure for it and the only way of preventing its spread is to dig up affected plants and destroy them. Of the insect pests, thrips are the worst. By their persistent attacks these minute black insects cause malformation of the growth and discolouring of the blooms. They may be kept in check by frequent spraying of nicotine sulphate to which has been added a solution of soft soap. Some of the D.D.T. preparations now on the market have given good results. However, one of the best preventives is to keep the plants growing vigorously. Should they suffer from lack of moisture, the general health of the plant is impaired, and the thrips seem to take advantage of this weakened condition.