

General decline and dieback

Decline is the most prevalent problem of ornamental plants in the urban environment, particularly in plants alongside roadways and sidewalks.

Symptoms: Landscape trees and shrubs with decline show thin foliage and dead branches in the crown adjacent to apparently healthy branches. Branch dieback begins in the top of the canopy in deciduous trees and on the lower branches in narrow-leaved evergreens. On deciduous plants, the leaves change color and drop earlier in autumn, and the spring flush of growth occurs later than in healthy trees of the same species.

Cause: Pathogens are frequently involved, but urban environmental stress is of primary importance.

Control: Revitalize the root system of the declining plants in the following way. Bore holes in the lawn in the fibrous root zone under and just beyond the drip line of the plant canopy. The holes should be 18 to 24 inches deep and 2 to 4 inches wide. Space the holes in rings around solitary plants, or, space them evenly between plants growing in beds. Space the holes one foot apart. Then, fill the holes with sand, coarse bark or sphagnum peat moss. This will improve the aeration and permeability of the soil and help to restructure the soil. Most important of all, water trees and shrubs during dry periods of spring and summer when rain is not frequent. Fertilizer can be added to the holes in future years, if needed.