RESEARCH LABORATORY TECHNICAL REPORT

BARTLETT TREE EXPERTS
SCIENTIFIC TREE CARE SINCE 1907

Hedge Pruning

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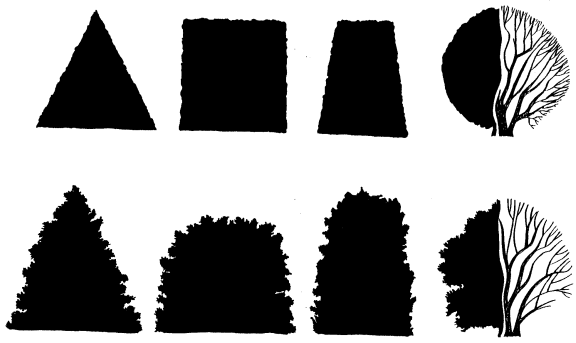
Hedges provide valuable screening, green fencing and elegant architectural features in many landscapes. Maintaining hedges can be challenging since many hedge species grow rapidly. In general, there are two ways to maintain the size and shape of a hedge: formal shearing or less formal selective thinning (Figure 1). Selective thinning, the cutting back of individual branches, is the horticulturally preferred method. This method provides a softer, less formal appearance and a healthier plant.

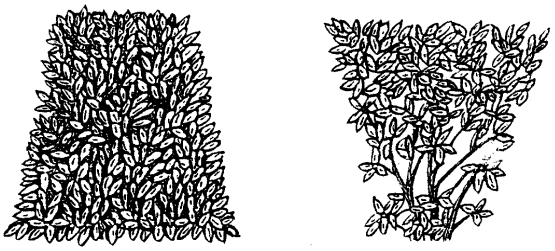
Shearing is the removal of a portion of the current season's growth to create a dense, formal appearance which is sometimes desired for architectural or aesthetic reasons. Shearing must be performed frequently to maintain a desirable shape. Once shearing is performed, however, its effects cannot be changed easily.

Figure 1: Shearing for formalized shape (top) and selective thinning for natural shape (bottom)



Often, hedges are pruned with the sides sloped inward so the base is narrower than the top. This shades the lower portion of the hedge and the plants become thin and leggy. A better way to shear is to shape the hedge either with vertical sides or with the top narrower than the base (*Figure 2*). This allows light penetration to the lower portion of the plants, encouraging uniform growth and providing a full, tidy appearance.

Figure 2: Proper shape (left) versus improper shearing (right) for hedges



To assure a desirable shape, begin pruning hedges when the plants are young. Most narrow leaf evergreens do not produce new shoots on old wood. Therefore, do not prune beyond the portion of the branch having healthy foliage. Evergreens respond best to light, annual or more frequent thinning rather than infrequent and heavy pruning.

Renovation Pruning

Over mature or overgrown hedges may require renovation. This involves selectively removing a third or more of the large, diseased or damaged stems. Species that respond to drastic renovation pruning include azalea, cleyera, privet, mountain laurel, hollies (**except** Japanese holly), and rhododendron. On multi-stem species, such as lilac, leucothoe and

mountain laurel, older stems can be removed periodically to rejuvenate the plant.

For broadleaf evergreen species which produce compact, dense crowns such as boxwood, yaupon and Japanese holly and some azaleas, the upper crown should be thinned annually. This allows light and air penetration to the center of the plant. Properly pruned boxwood and compact hollies should have foliage along the entire length of the stem. Young plantings should be trained early to encourage a desirable shape.

Plants which have been pruned as hedges for many years may require gradual renovation over a three to five year period. This should be performed on plants such as boxwood and Japanese holly, which do not tolerate severe pruning (Figure 3). Coniferous evergreen species used for hedges such as hemlock and juniper do not respond to drastic pruning. If these plants are overgrown or have undesirable shape, removal and replanting is recommended.

Figure 3: Boxwood responds best to light pruning

Growth Regulators

Plant growth regulators (PGRs) are materials that can be applied to trees or shrubs to reduce the amount of new growth. PGRs can be sprayed on the foliage of freshly pruned shrubs or soil applied to certain species. These materials result in smaller plants and denser, greener foliage. They will reduce, but not eliminate the need for multiple pruning during the growing season and reduce the amount of growth that needs to be removed. Flowering is either not affected or may be increased with common plant growth regulators.

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