Trimming Daylily Foliage

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A question that comes up often is whether it is beneficial to cut back daylily leaves. There isn't a single black and white answer because, while in most cases it won't kill the plant even if not necessarily helping it, sometimes it can be life-saving.

To be able to evaluate each different situation, it is helpful to understand the purpose of the foliage. Leaves capture sunlight and, through the process called photosynthesis, convert it into "food" for the plant, energy that can be used immediately or stored for use in the future. This is like the solar panel systems that are becoming more familiar on house roofs and on a larger scale in fields. So this is the first thing to remember, the leaves are what make the plant's food for growth, including root growth, and other purposes.

From this you can see that when we cut back the foliage we are reducing the amount of leaf that can make food for the plant. A plant makes all its own food with its leaves. Although we often loosely talk of "feeding" when we are fertilizing, fertilizer only provides extra minerals that are needed for the plant to function and which may not be at adequate levels in the soil for optimum performance. So cutting back foliage reduces the capability of the plant to make food for growth, and also forces the plant to use previously stored food to grow replacement leaves.

There are three main situations in which gardeners might think about cutting back. Daylily leaves can get ugly after flowering. We grow them for ornamental purposes after all, so we might cut back the ratty foliage to force them to regrow nice fresh new leaves more pleasing to the eye. Some of the foliage might be so brown or damaged that it isn't serving much purpose anyway, only green leaves can photosynthesize. When we cut back green leaves we are also removing the minerals etc. that are contained in those leaves and which the plant might have recycled. It's possible that the replacement leaves will have time to make up for the losses with increased photosynthesis and nutrient uptake, but we might wonder whether our interference has any other effects on the plant's life cycle, such as future flowering, that are not immediately obvious. Forcing new growth too late in the season might also compromise the winter survival of a less hardy daylily by depleting the amount of stored food. But for the most part, cutting back a mature established clump probably won't do it much harm even if it doesn't have any benefit for the plant.

A second situation that seems quite common is leggy seedlings under indoor artificial lighting. This is an indication to check the lighting for sufficient intensity rather than showing a need to shorten the leaves. Fluorescent bulbs tend to lose their brightness over time and a plant will notice this before we do. Maybe you need to replace the bulbs/tubes, or move the seedling set-up nearer to a window, or move the seedlings closer to the lights. Or you may need to reduce the amount of water or fertilizer if it is not possible to increase the amount of light.

Giving seedlings "haircuts" is sometimes justified by suggesting it will "send energy to the roots for growth" but, as you saw above, when you reduce the food-making leaf area you also reduce the amount

of energy for growth, including root growth. It also sets the seedlings back in time and cancels out the advantage of starting them early and it might, in theory, delay first bloom (which is based on plant size). But it won't kill them, although the conditions that caused the leaves to grow so long and floppy might also increase the possibility of health problems.

Since cutting back mature established plants, while probably not useful other than esthetically, doesn't usually seriously harm them, and cutting back seedlings indoors under lights tells you your growing conditions are unbalanced and sets them back, you might ask when is it actually beneficial to remove some foliage? To answer this we need to look at another major plant process, transpiration.

By far the majority of the water taken up by a plant is used for transpiration. Transpiration is a cooling mechanism whereby a plant's roots take in water which passes up the plant through the xylem vessels, and out of pores (stomata) in the leaves into the air. (A plant uses these pores also for gas exchange in photosynthesis, taking in carbon dioxide and releasing oxygen).

When we dig up a plant to divide and transplant, we can't avoid damaging the roots. The divisions may not have enough root area left to supply the original amount of foliage with water. This can be a life-threatening situation. We avoid it by cutting back the leaves, which reduces the need for water. In this case, the disadvantages of reducing the photosynthetic leaf area are outweighed by the need to balance water supply with demand to keep the plant alive.

However, the prevailing weather conditions at the time of transplanting bare-root and the maturity of the leaves can affect the need for, and amount of, foliage removal. If it is early in spring and the leaves are not fully expanded, and the weather is cool and/or cloudy and damp, the leaves may not be losing more moisture than the remaining roots can supply and you may not need to cut back. If the leaves are more expanded and the weather is hot, sunny and dry, then the transplants may benefit from cutting back to limit the leaf area losing water. If the leaves are visibly wilting or feel soft after transplanting then cutting back should be beneficial. The necessity and amount of cutting back are very much judgment calls that come with experience or observation.

Another situation where this question might arise is when planting out potted plants that have been kept indoors. Gardeners typically "harden off" seedlings and older plants that are not used to bright sunlight, temperature fluctuations and wind movement by putting them outdoors daily for increasing amounts of time, or placing them close to the house in a partly shaded protected area while they adjust. When the time comes for planting these out in the open garden, they may not need cutting back because the roots were not damaged. However, if the leaves are seen to be wilting after planting then shortening them is in order.

As you can see, the short answer isn't that cutting back is good or bad, but that it depends on the circumstances.