## HARVESTING A VALUABLE RESOURCE

Making the decision to undertake a large-scale tree management program is only half the battle. How to pay for it can be a daunting hurdle.

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n recent years, many golf courses have had to embark upon large-scale tree programs to correct problems created by overzealous tree-planting programs initiated years earlier. Planning and implementing a largescale tree removal project can be challenging in many ways. The process can be lengthy and frequently requires ongoing education of golfers, appropriate committees, and boards on the necessity of the program. The prospect of tree removal programs often becomes an emotional and potentially divisive issue.

The analysis, planning, and educational processes alone can take months or perhaps even years to fully develop. Depending on state and local ordinances, local officials also may need to be convinced that the work is necessary. In some areas, permits may be required before any trees can be removed. Outside consultants often are employed for their specialized knowledge of golf course architecture, trees, and sun angles. These individuals can be invaluable in helping to evaluate the condition and relative value of the trees. They also can help identify exactly which trees need to be removed to maximize turfgrass and tree health and value. Eventually, tree contractors are interviewed and bids to carry out the work are obtained. Next come the budgeting and scheduling processes. Only when all of these steps are completed can the actual process of removing trees begin. Many will argue that

getting to the point of actually removing trees is the most challenging aspect of the process.

Assuming all goes according to plan, the trees eventually are cut and carted away, the slash is chipped, the stumps are ground, and a very sizeable bill is paid. The result in most cases is quite remarkable. The formerly hidden topography comes alive and the aesthetic beauty of the course and its key features improve. The growth rate of any remaining trees usually increases dramatically as a result of the reduction in competition among trees, and a marked improvement in turf health and vigor can often be documented. However, it must be noted that turf accustomed to a very shaded environment often experiences some extra stress for the first season or so after its environment is radically altered. The grass species that are well adapted to a shaded environment frequently do not fare as well in full sun, and it may take a year or more for the turf to adjust and for better-adapted species to get a foothold.

Some courses do much of the work in-house, and costs are harder to compute; however, some grossly overplanted courses in the New York metropolitan area have spent as much as \$500,000-\$700,000 and more to have contractors remove the trees and stumps, clean up the debris, bring in topsoil, and restore the turf. With such a potentially large price tag, it makes sense to explore alternative means of tree removal in order to control costs. It is not practical everywhere, but trees can be worth plenty if you happen to have enough of the right types of mature tree species that are in good condition. Geographic location does enter into the equation. Distance from a potential buyer and the associated trucking costs greatly influence the financial outcome. Unfortunately, the relative quality of golf course trees generally is not high, often as a result of poor care and maintenance, undesirable varieties, or excessive competition among trees.

Mature hardwood and softwood trees that can provide timber and veneer offer the highest values. Smaller and lower-quality trees can sometimes be marketed for fuel wood and pulp. The idea of harvesting trees is not original. It is believed that the trees removed during the construction of Hackensack Golf Club (Oradell, New Jersey) were used to construct the clubhouse, and this is likely to have occurred at other early American golf courses.

This turf tip is not a new one, and it comes from the many courses that have utilized one or more different strategies in completing their tree work. Most notably, Oak Hill C.C. in Rochester, N.Y., and Beacon Hall Golf Club in Ontario, Canada, utilized portable sawmills to better utilize their tree resources and to reduce the costs associated with removals. The lumber generated was used to upgrade maintenance and storage facilities and to build restrooms on the golf course. Many other courses elsewhere in New Jersey, New York, and Connecticut have utilized large-scale logging companies to remove trees quickly and efficiently. Riverton C.C., Sleepy Hollow C.C., Round Hill Club, Hop Meadow Club, Yale Golf Course, The Patterson Club, and Concord C.C. are just a few that have chosen this route.

Harvesting trees is not practical for all golf courses. Many factors need to be taken into consideration, such as the location of the golf course and its proximity to potential markets; the volume of mature, marketable timber available for harvest; and the availability of an adequate area to stockpile the logs, and mill and store the lumber generated. If the sawmill is too far away and the quality/volume of wood is not substantial, it may not be possible to attract much interest.

For many golf courses, the only practical approach is to pay to have the trees removed. However, a large number of golf courses are defraying the removal expense in various ways.

• Traditionally, courses have used local tree contractors who are skilled in tree care and pruning. Putting largescale work out to bid can generate healthy competition and may lower costs substantially.

• A few courses have used land-clearing companies with large-scale logging equipment. This type of contractor can do the work very quickly and with less labor than traditional tree companies, ultimately generating considerable savings. However, they also may cause more damage to the course, so the benefits have to be weighed.

• Some courses have hired logging companies to remove and pay for the desirable timber. This money then can be used to pay for the removal of additional trees and restoration of the turf.

• Other courses have allowed loggers to harvest the desirable trees, and, as part of the agreement, the logger



Tree work may sound easy, but the resulting debris can be substantial and likely will have a major impact on the budget. Tree projects can generate potentially valuable wood that can be sold and used to create lumber.

removes other undesirable trees in lieu of payment.

• A number of golf courses have made agreements with firewood contractors to remove hardwood trees in exchange for the wood harvested.

• In some cases, golfers and/or the public are allowed free access to firewood generated, eliminating the cost incurred in disposal.

• Some courses have given their wood chips to contractors who produce mulch and have received a lifetime supply of mulch in return.

• Oak Hill C.C. and Beacon Hall G. C. brought in portable sawmills to generate usable lumber on-site. The lumber was then used for various course projects.

• Eastern trees commonly harvested for saw timber include: pine spp., oak spp., sugar maple, ash, red maple, black cherry, hemlock, spruce, yellow/black birch, tulip poplar.

A forestry background, although helpful, is not a prerequisite to implementing a harvesting program. Information and guidance are available to help you get started, and a good place to begin is with your state extension service or state forestry department. Most have excellent Web sites devoted to forestry and woodlot management. There you should be able to locate the state or county extension service forester who can conduct a site visit and provide a preliminary assessment of the trees and the potential for harvest. The forester will offer advice for the best harvesting options and should have contacts to private foresters and contractors who work in the region.

Clearly, many factors come into play in determining whether harvesting trees will be a viable approach for your course. However, when considering the potentially expensive prospect of large-scale tree work, it may be worth considering alternative methods to help control costs and better utilize a potentially valuable resource.

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