BUILD YOUR OWN GREENHOUSE

by Anita L. Halvorson Oak Ridge Country Club

Now that the 1988 season is starting to get under way, I think it is time to give you one more thought to ponder. I'm sure many of you have been slowly incorporating flower beds somewhere on your course. It might have started with a few flowers around the clubhouse. The patrons liked the color and suggested a bed or two on the course. Next a gardener was hired to care for the beds. Before long your flower budget has almost caught up to your fertilizer budget! Well, maybe not that high. What I am leading up to is the new trend at some of the clubs to build a greenhouse. Why a greenhouse? Well, that's the question I am going to attempt to answer.

I have been at Oak Ridge Country Club as the full-time gardener for the past two years and have been working on golf courses for the past thirteen years. One of the most frustrating problems I have found is dealing with the garden center or nursery about the flower order. Many times when the order comes the colors aren't what you ordered or they didn't send the number ordered. The plants are barely out of the soil or they don't have what you want. Then you have to scramble and make do with what they have sent or fight with them to get the order changed so you can get the beds in by the time the golfing season is over. Therefore, from the gardener's viewpoint, the reasons for a greenhouse are to get plants of a proper size and color and to gain control of what to plant. From the superintendent's viewpoint it can be economical.

There are many types of greenhouses: Glass, fiberglas, single and double poly. Glass is, of course, more breakable and appealing to vandals. Fiberglas retains heat better than glass or poly. Poly is the least permanent and needs to be replaced every two or three years. If built properly, a double poly greenhouse can be heated fairly economically. You have to decide what is going to work best for you. At Oak Ridge we chose a free standing double poly hoop house. Our initial cost for the greenhouse was as follows:

Framework (for 24' long)	260.00
Poly (double 6 mil)	106.00
Lumber and insulation	300.00
Gravel (floor)	50.00
Exhaust fan and thermostat	75.00
Blower fan for inflating	24.50
the two sheets of poly	
Heater	Donated

Pipe, etc. for gas and water	.200.00
Door	75.00
Benches	200.00
Propagation Mat and thermostat	133.00
Pots, soil and trays	500.00
Total Cost	51,923.50

After your initial set up cost, the following year's expense will be minimal. Soil, fertilizers, chemicals, seed, water, fuel, electricity and every two or three years the new poly (if you chose a poly greenhouse). The results for us have been measurable. From a \$300.00 seed order, you can carefully harvest enough flowers to blanket your course in colorful flowers. I also forced some tulips and daffodils for the clubhouse throughout the winter and spring.

Some of the most important aspects to consider when building your greenhouse are placement on the site, heating and cooling, humidity control and light. Having decided what type of greenhouse you are going to build, you obviously don't want to waste its potential by placing it in the shade of tall trees, buildings or hedges. It is worth remembering that, because the sun is lower in the sky in the winter than in summer, the shadows it casts are longer. Make allowance for this if you are planning where to put your greenhouse in the summer. Any shadows will be at least four times longer in winter and that is when you need the most sun. On the other hand, buildings, hedges and trees can be useful shelter from cold winter winds that could cool the greenhouse and add to fuel bills.

While heat is important in the greenhouse in winter it is worth remembering that a greenhouse is such an efficient sun energy trap that it can overheat in spring and summer. Probably more plants are lost through over-heating than through under-heating in winter. When considering automation for the greenhouse, ventilation and cooling controls, a convenient water supply is also essential since few things are more annoying than running around with watering cans. Your costs will vary depending on availability of materials and the extent to which you want to equip your greenhouse.



an assistant, a co-worker who is interested in our association . . . be sure to bring them to our next meeting.