Ornamental Production

Managing Equipment and Supply Inventory

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> "What do you mean we're out of 4″ pots! Didn't we just get a new shipment in?"
> "How could this many tools just disappear?" "I just know I've got those depreciation schedules around here somewhere…"

Do any of these scenarios sound familiar? Hopefully not, but if they do, you may be experiencing inventory control problems. Managing inventory can be one of the most arduous tasks that face greenhouse managers. But it doesn't have to be. Applying some basic inventory management principles may eliminate some of the headaches.

In order to maintain control of plant materials, equipment, tools, and supplies, an inventory control system is needed. Business management experts often classify inventory systems according to the usage of the item in inventory. Following this line of thought, a greenhouse inventory system can be categorized into three groups including plant material inventory, equipment inventory, and supply inventory. The following discussion considers only equipment and supply inventory. Plant material inventory systems will be discussed next month.

A considerable financial investment is made in equipping and maintaining a production greenhouse operation including cars, trucks, tractors, potting machines, pumps, injectors and irrigation equipment, sprayers, storage equipment, etc. Besides the large equipment, many types of hand tools, such as are also needed. Some form of management control must be maintained over the equipment if the greenhouse is to maintain a physical inventory of all equipment and to develop plans for security, proper use, and maintenance.

When major pieces of equipment are purchased by the nursery, they should immediately be given an inventory number. A code number that contains the year of purchase and the functional unit the equipment is assigned to is extremely useful. This number should be painted or stamped onto the equipment and then entered into the inventory and maintenance records. The equipment inventory, maintained as either a card file or a computer file, is kept in the business office as a record of purchase with the name of the supplier, purchase price, depreciation schedule, and other related information.

Some greenhouse operations send a maintenance card (with proper identification number, name, year, and model) to the mechanic to record all maintenance and repair data. Equipment purchases should ideally be limited to as few manufacturers as is feasible to reduce the inventory of parts that need to be maintained by the mechanic. Knowing which parts are stocked by a local supplier can reduce the greenhouse's spare parts inventory.

Some greenhouse operations find it desirable to maintain a "use log" on some equipment to determine the efficiency of the equipment. This information is very helpful in calculating the cost of operating equipment on a per hour basis (which is part of the overall cost of production calculation). For efficient use and security,

all equipment should be assigned to responsible individuals and the individuals properly instructed in use and maintenance procedures. Company policy pertaining to use and maintenance of equipment should also be clearly stated in a policy manual of the greenhouse business. Painting equipment, especially small items and hand tools, in a distinctive color can aid immeasurably in preventing loss. The use of distinctive markings can also minimize the mixup of equipment among divisions or among crews in a diversified greenhouse operation.

Valuable equipment should be stored in a locked facility that also provides protection from the weather. Company policy should provide the necessary guidelines for the cleaning and storage of equipment. By establishing and maintaining a good equipment inventory and management system, it is possible to gain a high degree of control over the equipment, and at the same time assure its safe, effective, and efficient use.

Greenhouse firms also have large financial investments in supplies. Management can exercise control over the use and expenditure of supplies by maintaining an accurate supply inventory control system, providing appropriate areas for storage, and by establishing security methods. Supplies are often classified as:

1. items necessary for certain phases of production (propagation, planting, harvesting)
2. equipment maintenance supplies
3. office supplies

When inventorying supplies, each stocked item is described along with the common unit of purchase. In addition, it is desirable to list sources of supply, price per unit, and pertinent comments. These data, commonly kept on file cards, can also be put into a computer for rapid retrieval of supply and availability information.

Supplies for the separate divisions or crews of the greenhouse should be purchased primarily by the business office. But provisions should be made for a responsible employee to make purchases for the greenhouse in case of an emergency or in the best interests of the business.

Supplies should be stored in proper facilities and when appropriate under proper security. Packaged supplies such as fertilizer and peat moss should be stored in covered sheds to minimize destruction by wind and rain, whereas non-degradable materials may be left exposed. All chemicals should be stored in their original containers and marked with the year of purchase and used in order of purchase date. Poisonous chemicals should be stored in a specially-marked storage cabinet and flammable materials kept in fire-resistant containers. Only usable quantities of supplies should be kept in work areas with the balance in a locked supply-storage facility.

A periodic inventory (weekly, monthly, quarterly) of supplies should be taken to determine use rates and to prepare orders for bidding. In some greenhouses, considerable quantities of materials (containers, trays, plastic, soil amendments, fertilizers, peat moss, etc.) are used, and competitive bids from three or more suppliers are worthy of consideration. If the amount of materials used during the month or quarter exceeds the normal amounts used as determined by past history or by logical estimates of use, the manager should review the situation with key supervisors and determine if corrective measures are needed.

Inventory data on equipment and supplies must be collected and processed in a meaningful manner if the greenhouse is to attain its profit objective. However, it should be remembered that few people like to collect data and to keep records. All forms should be as simple as possible, and methods of recording data should be carefully worked out to make sure that it can be done expeditiously and correctly. Steps should be taken to explain the need for record keeping to everyone involved and to make the process as painless as possible. Recording, filing, and analyzing data requires time and is expensive. Recording too much data can be as bad as recording too little. A well-planned and carefully monitored system of inventory control can provide

management with an effective tool for decision-making.

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