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Landscape Contractor News

Construction council backs local compensation

The National Construction Industry Council (NCIC) voiced its opposition to a national workman's compensation law in a position paper at its recent quarterly meeting, citing flexibility of current state laws and the cost of a national law. Many groups, including the National Chamber of Commerce, have opposed a national compensation law.

In other action, the NCIC will soon have a representative on the Advisory Council to the Council on Wage and Price Stability. The Associated Landscape Contractors of America is a member of the NCIC and will therefore have a voice in wage and price recommendations.

Part-time workers provide advantages

A study by Georgetown University's School of Business has revealed that part-time workers provide savings because of lower fringe benefit costs, reduced overtime, and higher productivity. The U.S. Department of Labor sponsored study also cited problems of supervision and paperwork with part-time workers.

Interior landscapers to meet in St. Louis

The 1979 Interior Landscape Symposium will be held at the Bel Air Hilton in St. Louis, Sept. 19-21. The Associated Landscape Contractors of America are sponsoring the event and its Interiorscape Committee is conducting the symposium.

The three-day symposium will cover a wide range of topics for the interiorscape industry. Its three major focus areas are: maintenance for interior landscapes, interior foliage environment, and bidding and estimating interior projects. An optional half-day tour of noteworthy interior landscape projects in St. Louis will immediately follow the final session.

The "Environment for Interior Foliage Plants" segment will feature a program on "Acclimatization" presented by Leonard Kersch (Garden Milieu, Inc.), and a panel session on "Lighting" moderated by Richard L. Gaines (Interior Landscaping Consultants).

"Bidding & Estimating" will be a full program presented by a panel of three — a financial consultant, a small-to-medium interiorscape contractor, and a large interior contractor. The three will discuss the process of developing an estimate and bidding on a project, and then will moderate an estimating exercise with the whole audience. For their example they'll use a set of job specifications and a typical contractor's company profile.

"Maintenance for Interior Landscaping" will encompass a series of short presentation on all aspects of interiorscape maintenance: maintenance personnel, crew structures, uniforms, vehicles, procedures manual, work scheduling, client-contact relations, and supervisors.

Discount credit rate for AAN members

Under a plan from the American Association of Nurserymen, the discount rate for VISA and Master Charge credit sales is 1.95 percent for all members desiring to participate.

The AAN received the discount rate after signing a contract with First American Bank, McLean, Va., to handle all VISA and Master Charge sales. The discount rate is the amount deducted from the bank card charges submitted by retail firms to the bank which accepts and processes the charges.

A recent survey of association members showed the average annual volume of sales on VISA and Master Charge is about \$50,000 per firm, and the average discount being paid is slightly over 3.5 percent. An AAN firm which fits this description could save as much as \$775 a year by participating in this new program.

Jacklin Seed Co. and Pickseed have reported that excessive rain last summer and fall prevented good burns to clean the fields. Doyle Jacklin said the availability of seed will drop as early as November when stocks in storage become depleted. Prices have already increased to slow demand.

Higher production costs and attractive beef prices diverted tall fescue production to feed in the Midwest according to Herman Schulte of Mid Continent Seed Co., in Marshall, MO. Tall fescue prices are expected to reach 45 cents per lb. and level off.

HERBICIDES

Expanded label for ornamental spray

Orthene insecticide has been granted an expanded Tree and Ornamental Spray label by the EPA, according to the manufacturer, Chevron Chemical Co.

The new label will add a significant number of pests. These include aphids on trees and shrubs, tent caterpillars, leafrollers, adult root weevils, and the Nantucket pine tip moth larvae. The spray will also control lace bugs, webworms, scales (crawlers), Birch leafminer, and Douglas fir tussock moth larvae.

For outdoor floral crops, Orthene is now labeled to control lygus bugs on daisies, statice, and yarrow. It is also usable for mealybugs, whiteflies, thrips, and scales on all foliage plants plus orchids, anthuriums, cacti, and poinsettia.

INSECTS

Busier bees make better pollinators

It may be possible to breed busier bees that do more pollinating.

Scientists at the USDA Bee Breeding and Stock Center Laboratory in Baton Rouge, La., are cooperating in a research project on honey bees with the Louisiana State University Agricultural Experiment Station.

Honey bees are responsible for pollinating millions of acres of crops worth trillions of dollars. Even though agriculture has become increasingly mechanized, no substitute for these insect laborers has been found — nor is any likely to be discovered.

More efficient pollination could increase crop production, particularly in areas where bees now have to be brought in to pollinate crops.

The researchers are studying 24 genotypes of honey bees and their activities, and they eventually hope to determine if some are harder workers.

About 8,000 bees from each genotype are confined to a screened-in area in a clover field. Once the bees are released, the researchers wait, watch, and record various facets of bee behavior.

Laboratory research leader Dr. Thomas Rinderer, who has studied bees for almost 20 years, notes that the insects have a highly complex social life, and also engage in a relatively complex sequence of actions as they pursue pollen.

Rinderer, Experiment Station agronomist Dr. Bobby Harville, and several assistants determine how many flowers a particular bee visits during a minute, how many bees are found in a particular square meter of clover during a 30-second interval, the percentage of a blossom that a bee covers while gathering pollen, and the time that a bee spends visiting a flower.

Seventy-five clover plants from which the florets have been removed to prevent self-pollination are covered with bags before the experiments begin. The bags are removed during the experiment, and the plants are covered again when the experiment ends.

Harville then counts the seeds on each plant, an indication of how effectively bees of each genotype distributed pollen.

Other factors may also be associated with more efficient pollination, such as the leg movement of a bee as it visits a flower and how actively the bee digs into a flower during its visit.

Malathion, Diazinon, and sevin are primary chemicals used for ornamental uses around buildings and residences.

The grasshoppers lay eggs along fence rows, roadsides, and field margins. Hatching areas can be treated before emergence occurs with a bait of Toxaphene, molasses, and mill-run bran.

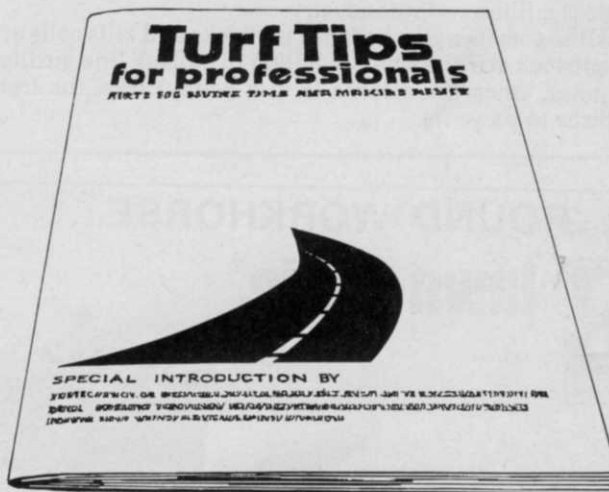
Once the hoppers have emerged, repeat applications are needed to stop migrating insects.

Energy gives sensitive trees needed rest

Light sensitive trees, including elms and sycamores, can now rest that city engineers are playing down the use of bright night lighting due to energy conservation, according to USDA horticulturist Marc Cathey.

Bright night lighting, especially high pressure sodium lights, disrupts the day/night cycle of sensitive trees

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AUGUST 1979/WEEDS TREES & TURF

INSECTS

Grasshoppers are ravaging Texas

Grasshoppers are ravaging crops and gardens in the Texas Panhandle and are spreading south and east according to Texas A&M University reports.

Counts more than five times serious levels, usually considered eight insects per sq. yd., have farmers banning together to pay for massive applications of malathion.

GOVERNMENT

UPDATE

EPA changes registration policy

The Environmental Protection Agency is departing from past policies to speed up the availability of so-called "biorational" pesticides that control crop-destroying insects and other pests through natural means, says Steven D. Jellinek, assistant administrator for toxic substances.

He defines "biorational" pesticides as viruses, bacteria, protozoa, fungi, and certain naturally occurring biochemicals that either attract, retard, or destroy pests. These pesticides, Jellinek says, should be easier to register than conventional chemical pesticides, which are inherently toxic.

Jellinek made the announcement at the opening of a new plant in Wasco, Calif., which will produce an insect virus lethal to cotton pests but harmless to people and the environment.

Virus causes walnut tree disease

A U.S. Dept. of Agriculture plant pathologist has discovered a virus that produces blackline disease in English walnut trees.

The discovery, by Srecko M. Mircetich of USDA's Science and Education Administration-Agricultural Research, Davis, could save the annual \$200 million walnut industry.

Blackline gets its name because it attacks and kills cells at the union of the rootstock and the scion resulting in a black line girdling the tree at that point. Once the disease is in a walnut tree, the tree may die within three to six years.

forcing them to grow continuously without rest. This results in stress and increased susceptibility to air pollution. Night lighting also delays fall dormancy exposing late fall growth to frost damage. Death is not a result of night lighting.

Cathey says the trend to more efficient lighting should considerably reduce the stress on trees.

Hollies, rhododendron, linden, and most maples are moderately sensitive to night lighting. Oaks, evergreens and many fruit trees are insensitive. Cathey tested 54 trees and shrubs.

Cathey adds that light is only one of many urban stresses on trees, but that it should be a consideration for selecting plants for brightly lit areas.

HERBICIDES

Banvel herbicides get new registrations

Banvel herbicide and Banvel combinations have recently received several new label registrations from the EPA, announced Velsicol Chemical Corp.

Federal clearances include:

Weedmaster herbicide, a pre-mix combination of 1 lb. dicamba and 3 lb. 2,4-D per gal., is cleared for control of broadleaf weeds in pasture and rangeland grasses and in noncropland areas such as fence rows, roadways, and around farm buildings. Apply when weeds are actively growing at rates ranging from 1 pint to 2 qt. acre.

Banvel herbicide is cleared for control of musk thistle in pastures and noncropland areas at a rate of 1 to 2 pints/acre in 10 to 20 gal. of diluted spray, applied when the musk thistle is actively growing.

Banvel is approved for control of multiflora rose in pastures and noncropland areas at a rate of 1 gal. of Banvel in 99 gal. of water. Use 100 to 200 gal. of solution per acre.

MonDak, a pre-mix combination of dicamba and MCPA, is cleared for grass seed production in Idaho, Oregon, and Washington. Use 1½ pints MonDak on early seeding weeds (4 in. or less in height) after winter dormancy up to the early boot stage of the grass. Applications can be made to lawn-type fescues, perennial ryegrasses, and Kentucky bluegrass.

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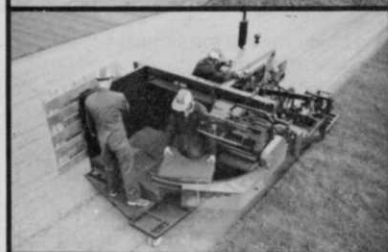
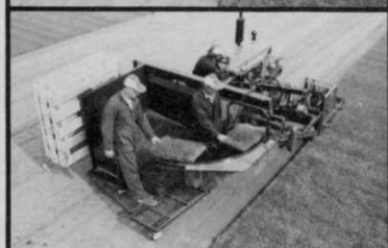
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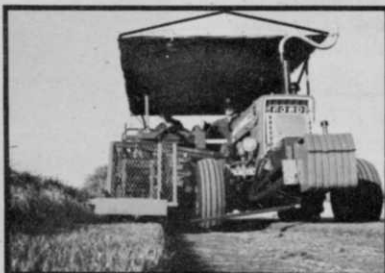
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WHY

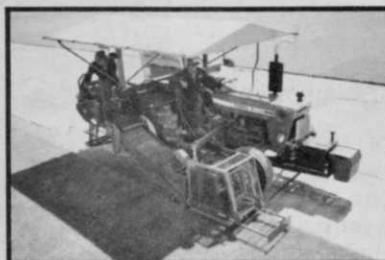
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SAFE CHAIN SAW USE LINKED TO TECHNIQUE, SIZE

Adapted from a soon-to-be-released audio/visual program by the National Arborist Association, "Chain Saw Safety and Use." This is the latest of eleven audio/visual programs by NAA to aid in training professional arborists.

Although chain saws have made the work of the arborist easier, improper use can result in personal injury. The potential for accidents seems to have increased in direct proportion to chain saws decreasing in weight.

In 1976, chain saws were responsible for 76,000 reported accidents ranging from cut fingers to sudden death. These figures include all chain saw users, from occasional users to professional arborists.

Selecting the proper chain saw for the job at hand is a primary consideration. The weight, horsepower and length of the bar are important factors.

The greater the horsepower and larger the engine, the more the chain saw will weigh.

Large chain saws with long bars are best used for heavy cutting of large wood and in felling operations. Medium-size saws are for light cutting, bucking and limbing. Light-weight saws are used primarily for pruning up in the tree.

Chain saws are almost all driven by two-cycle, gasoline engines which power a sprocket driving the chain around the bar. Some chain saws have direct drive, from engine to sprocket. Others obtain more power by transferring engine power to the chain through a gear box. Other saws are powered by the hydraulic system from an aerial lift device.

Following the manufacturer's recommendations is essential for good maintenance. This is particularly true of the fuel mixture.

The chain and bar must be well lubricated with oil especially designed for this purpose. All chain saws have an oiler device which allows the operator to pump lubricating oil onto the bar while the saw is in operation. Some have automatic oilers. Always be sure that the oil tank is full as the oiler is a safety device as well as a means of preventing excess wear.

Chain saws perform best at high revolutions per minute (RPM). Always be sure that the chain is moving before making contact with the wood. Never overload or cause lugging of the engine.

Peak performance depends upon chain condition. The chain should be properly filed as per the manufacturer's directions. The tension of the chain should never be so tight that it prevents moving of the chain with your hand or so loose that it exposes the drive links on the underside of the guide bar when in the rest position. Never allow the chain to come in contact with sand or dirt as this causes cutting edges to become dull. A sharp chain cuts faster, easier, and more safely.

The bar grooves should be cleaned frequently to remove any buildup of grit, and the bar should



When two men are using chain saws at the same time, they should be at least ten feet apart and aware of each other's movements.

be turned from time to time to prevent uneven wear.

The air filter should be cleaned daily, as well as the cooling fins and sprocket. Use mineral spirits, not gasoline, to clean these parts as a safety measure.

All bolts and nuts should be kept tight and the muffler should be inspected frequently for repair or replacement.

The sprocket should be checked for wear weekly. A worn sprocket causes unnecessary wear of the chain. A good rule of thumb is to replace the sprocket every time the chain is replaced.

Trigger throttles, handles, chain brakes, and safety tips are all safety features available for chain saws. To be effective they must be used properly.

When refueling a chain saw, use a funnel or flexible nozzle to avoid spillage on the engine. If there is spillage, the engine should be thoroughly cleaned before starting. Smoking while handling fuel anytime is hazardous. Never refuel a chain saw on grass because any spilled fuel will cause turf damage. It is a good rule to be at least ten feet from the refueling site before restarting the chain saw.

Gasoline should always be kept in a safety gas container. Never use plastic or glass bottles and keep the container in a truck compartment designated specifically for this purpose.

When using a chain saw, personal protective equipment must be worn. This includes work gloves, hard hat, and safety shoes. Eye protection must be worn to guard against flying debris and dust. Ear protection should be worn if there will be prolonged exposure.

A person qualified to give first aid in the event of an accident should be available during use of a chain saw. Qualifications should be a Red Cross, Multi-Media or Bureau of Mines first aid course or equivalent. A physician approved, well-stocked first aid kit should be available also. This kit should be inspected weekly to be sure that it is well-stocked and a record made of each inspection.

In order to handle a chain saw safely, the operator should be well trained. This training should begin with the operator becoming familiar with the information in the saw manufacturer's operations manual as well as the employer's safety manual.

A new employee should observe chain saw operation before being allowed to actually operate one. After observation and complete instruction, the employee can be allowed to operate a chain saw under close supervision.

Only when the employee has demonstrated a thorough knowledge of the saw and its safe operation to the supervisor, should he be allowed to use it unsupervised.

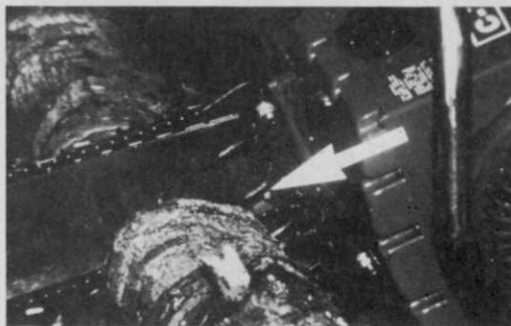
A pre-job briefing by a supervisor or foreman informing crew members of hazards that pertain to that particular job adds to chain saw safety.

A chain saw operator should never work alone and always be conscious of these requirements:

- the space around the area of use should be clear of brush and debris.
- the operator should have secure footing and the chain saw should be firmly supported. Operating a chain saw above shoulder height should be avoided.
- start the engine and operate the chain saw only when all co-workers are clear of the saw. Hold the saw with both hands and allow the saw to warm up before cutting.
- when changing location, the chain saw should be carried with the blade to the rear and with the hot muffler away from the body. Never carry a chain saw on your shoulder or with the chain in motion. If you are moving any distance, or if you let the saw down, stop the engine.
- always be sure that the chain stops rotating around the bar when the throttle control trigger is released.
- proper stance is important for safe operation of a chain saw. The left elbow should be straight with the thumbs on the underside of the handlebar. The body should be entirely to the left of the force and reaction of the chain saw so as to prevent any upward movement of the chain saw from striking the operator's body.
- on steep slopes, the chain saw operator should always stand on the uphill side to prevent logs from rolling into him.

Binding

Binding of the saw occurs during cutting when the weight of the wood being cut causes the wood to close on the chain. This can be avoided during tree removal operations by placing a malleable metal or



Bucking bar (top) adds leverage to cutting. You should not be able to see the drive links on the underside of the cutting bar with the chain in the rest position if the chain has proper tension. (above, lower)

plastic wedge in the back cut pointing in the intended direction of fall. After the wedge is firmly seated with a sledge hammer, cutting can resume until the tree is ready to fall.

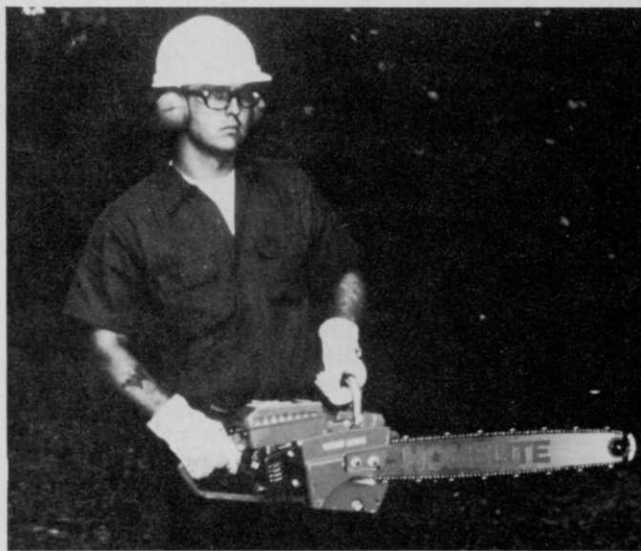
Bucking is the cutting of large limbs or trunks of felled trees on the ground. Binding can occur here also. To avoid this, undercut one-third of the diameter of the piece and then cut through from the top. Most chain saws are equipped with spikes on front of the engine. This is commonly called a bucking bar and acts as a pivot point to apply leverage for cutting.

When limbing or removing the branches from a felled tree or large limb, leave the large lower limbs to support the log off the ground. Branches under tension are very dangerous and should be cut on the outside of the arc or curve. When a fallen tree is supported by a limb or sapling acting as a spring pole, extreme caution must be used. If possible, roll the log over with a peavey to relieve the pressure. If this is not possible, keep your feet clear and cut the limb close to the trunk and on the outside of the curve. If you cut on the inside of the curve, the saw will bind. If the limb is large enough to hold the log well off the ground, the situation becomes more dangerous and the cutting must be done so that if the log moves, it moves away from the chain saw operator.

Only experienced personnel should use a chain saw aloft in a tree.



Wedge behind saw in cut prevents chain binding (left). Protective clothing (right) includes gloves, hard hat, and eye and ear protection.



Chain saws weighing more than ten lbs. service weight should be attached to a line crotched separately from the operator's and in such fashion so that in the event of the operator releasing the chain saw, it would swing away.

Saws weighing less than ten lbs. can be attached to the operator's belt by a lanyard that would allow the saw to come to rest below the operator's feet in case it fell.

When operating a saw in an aerial lift, it should always be started outside of the basket.

Other NAA Programs

Chain Saw Use and Safety is the latest program constructed and made available by the National Arborist Association. You do not have to be a member to purchase these programs. The cost for each program, which includes a cassette tape of instructions and a tray of slides, is \$50 for nonmembers and \$25 for members. Besides Chain Saw Use and Safety are:

1. Basic Instruction for Tree Care Trainee
2. Tree Climbing Techniques
3. The Reasons for Pruning
4. Tools and Techniques of Pruning
5. The Reasons for Fertilizing Trees & Shrubs
6. Tools and Techniques of Fertilizing Trees & Shrubs
7. Tree Removal Techniques
8. Technique of Spraying
9. Professional Spraying Operations
10. Technique of Cable Bracing

For further information, contact the National Arborist Association, 3537 Stratford Rd., Wantagh, NY 11793.

Kicking back

Most chain saw accidents are a result of the saw kicking back. This can occur if the chain suddenly hits a solid object or takes too large a cut. The chain stops for an instant transferring the engine torque to the bar and engine. The direction of the reaction depends upon where contact is made along the guide bar.

If the contact is made at the upper part of the bar nose, the reaction will be an upward arc toward the operator. If the contact is on the lower part of the bar nose, the reaction will be a pull away from the operator. In either case, proper hand holds and stance can prevent an accident from kickback.

To give you some idea of the power of a chain saw, the RPMs of a chain saw can drive a chain 24 mph with 1,100 lbs. of thrust with a potential kick-back speed seven-and-a-half times faster than the reaction time of a human being.

Slicing cuts occur when a chain saw slices through a limb or log unexpectedly striking the operator. Alertness and proper stance can also prevent this.

If two workers are operating chain saws, a minimum distance of ten feet should separate the two. A worker should never approach a chain saw operator until his presence has been acknowledged by the operator.

Keeping a chain saw clean and storing it properly are very important. A chain saw and its fuel should be stored in the lowest compartment on the truck to prevent seepage of fuel onto ropes and supplies.

A chain saw safety program can only cover safety in a general way. Each chain saw operator has a responsibility to himself to function safely and each supervisor or manager has a responsibility to employees to instill a desire to follow safe work practices. Carelessness can and will result in injury.

WTT

How Roundup® helped Jim Siegfried renovate his fairway in days, without closing it for one minute.



Take a good look at this good-looking fairway.

Last fall, Jim Siegfried found a way to clean it up, without tearing it up—at the height of his club's busy season. With Roundup® herbicide by Monsanto.

Jim is the Greens Superintendent at Losantiville Country Club, Cincinnati, where bermudagrass had become a serious problem on the 18th fairway. To control it, Jim applied Roundup once—while the weeds were still actively growing—right at the start of the Labor Day weekend.

"That's really 'prime time' here," Jim told us. "But after we applied Roundup, we kept the fairway in play the whole weekend, and after. The members played right over it, with no problem."

Since Roundup has no residual soil activity, and won't wash or leach out of treated areas to injure desirable plants, Jim simply took normal precautions against spray drift—and didn't worry about damaging desirable vegetation along the fairway.

Even better, he was able to re-seed right into the dying bermudagrass only 7 days after applying Roundup—without loss of playing time or inconvenience to the membership.

Reinfestation won't be a big problem for Jim, either. He knows that Roundup destroyed the rhizomes of the treated weeds, helping prevent their regrowth.

Jim thinks he'll use Roundup again this year—and apparently some club members hope so, too. "As soon as they saw how good this fairway looks, some of the members started asking when I'm going to do the same for #10, where we have some more bermuda. I'll probably tackle that with Roundup this fall!"

If controlling many tough emerged weeds and grasses is a problem for you, see your local Monsanto representative or chemical dealer soon for your supply of Roundup.

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PRECAUTIONS FOR DIGGING AND TRANSPLANTING OUT OF SEASON

By Maria T. Cinque, Extension Specialist, Nassau County, NY

Spring and fall are typically when most ornamental trees and shrubs are planted and transplanted. Movement of plant materials in the summer is usually not advised because of extremely high temperatures, reduced amounts of moisture and rapid water losses. Yet it is known that professional horticulturists dig, move and plant throughout the summer and with a fairly high degree of success.

What is it that nurseries and landscape crews do to account for the high success rate at this time of the year? Most experienced nursery people who dig and plant trees and shrubs at this time say it is a matter of experience in knowing to do the right thing at the right time.

Not all nurseries will dig plant materials throughout the summer. Some dig until the temperature reaches 80 to 85 degrees F. while others carry on throughout the summer regardless of the temperature.

Some of the tricks of the trade of growers who dig and move trees and shrubs throughout the summer are:

Prior to digging, growers will root prune plant materials in a series of stages. By root pruning or gradually severing the roots, the plant will form a more compacted root ball with many feeder roots.

For large trees, the first step in root pruning is done the season prior to digging. A trench is dug around the tree at the distance of the desired root ball and about two feet deep. By the time the tree is actually dug or broken over, (which is the final stage of root pruning) the severed roots will have developed enough feeder roots to lessen the shock of moving the tree.

Some growers have indicated that they will wrap and lace the root ball while it is in the hole even though the tap root is still intact. In this case,

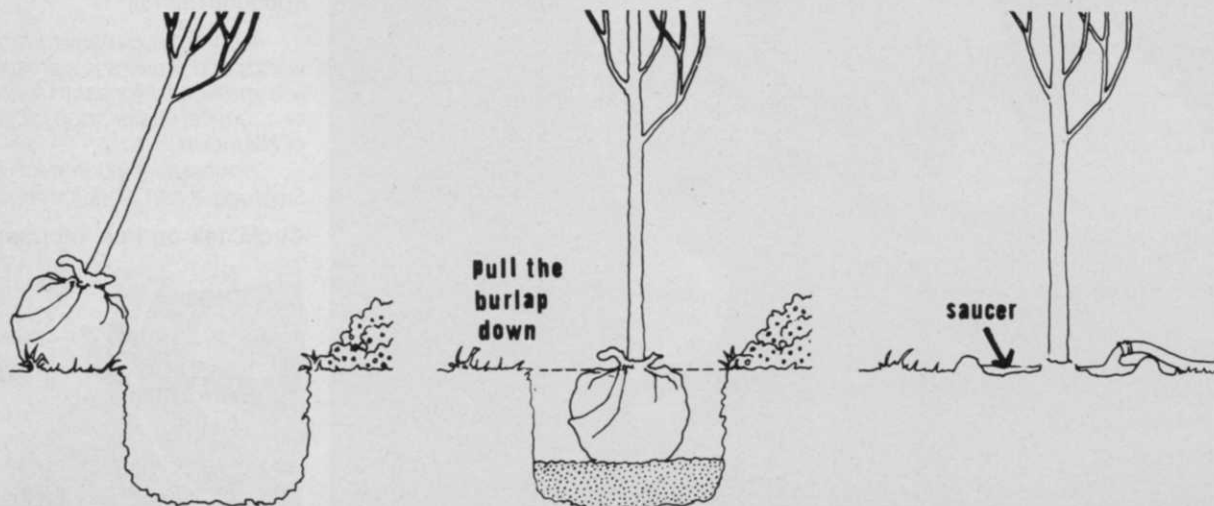
the soil is kept dry and they are then hand dug while they are still dry. After digging the root balls are immediately saturated and the plants are placed in an area where they are continuously misted during the daylight hours. The plants are kept in this misting area until the new growth hardens off which may be anywhere from three to seven days.

Other growers mechanically dig their materials and prefer the soil to be on the moist side prior to digging. The plants are also placed in a misting area for hardening off. Plants are also hardened off by being placed in the shade for a period of time, without continuous misting, although the root ball is kept moist.

Since most plants are root pruned in the field prior to digging, it is therefore important to **reduce the amount of top growth**. The smaller root system cannot adequately support the same amount of top growth as the pre-pruned roots did. For deciduous materials, it is recommended that as much as one-third of the top growth be removed. Trimmed trees will usually surpass untrimmed trees in size within a two to three-year period. Some nurseries will literally pull the leaves off the trees to help them get through this rough period. Whether the leaves are pulled off or fall off on their own, the trees will break out again, in most cases.

It is best to **dig evergreens once the candles have hardened off**, whether this be in the field or in a misting area, as previously mentioned. It should be known that a way of reducing the top growth of evergreens is to remove the candles. This will eliminate further water losses and help the plant to maintain its turgidity.

Anti-transpirants, which are materials sprayed on the foliage of trees and shrubs, are used by some growers to reduce the rate of transpiration by the



Planting Guides: Hole should be twice the ball width and depth. Six inches of topsoil should be under ball. Backfill with two parts topsoil to one part peat to top of ball and make saucer diameter of hole.