

BENEFITS OF TREES

Trees in our gardens, schools, churches, parks and on the streets
make our lives more enjoyable, comfortable and health

Trees

Increase pride in our local communities

Bring beauty and character to neighbourhoods

Cool air and homes – clean pollutants out of air and water

Absorbs carbon dioxide from the air and replenishes it with oxygen

Screens unpleasant views or sounds – provides windbreaks

Reduces crime – offers serenity and relaxation

Helps communities to work together

Creates habitat for wildlife

Save energy

PARTNERS IN GREENING IN KZN
INSTITUTE OF ENVIRONMENT&RECREATION MANAGEMENT
DEPARTMENT OF FORESTRY AND WATER AFFAIRS
DEPARTMENT OF AGRICULTURE AND ENVIRONMENTAL AFFAIRS
DEPARTMENT OF EDUCATION

CARING FOR YOUR TREE

WATER

Water is crucial for your tree's survival, particularly during the first year after planting

- ❖ water your tree when the soil is dry beneath the mulch
- ❖ apply approximately 46 – 70 litres of water once per week and as often as twice a week during hot and dry weather (Watering may not be necessary during times of heavy rainfall and cool weather)
- ❖ trickle water onto the soil surface using a hose, or allowing water to seep from a bucket with small holes in the bottom.

WEED AND CLEAN

Weeds and rubbish can prevent water from reaching your tree's roots, and causing a decline in your tree's health. Substances like motor oil, detergents and urine can kill your tree.

- ❖ Weed and clean the area around your tree periodically and prevent toxic substances from entering the soil.

PROTECT

Tree roots require water and air for survival. Compacted soil and cemented pits prevent water and air from reaching tree roots.

- ❖ Avoid compacting the soil by piling concrete and other rubbish, walking, or even driving on the area around the tree.
- ❖ Never cement over the surface of your tree pit.

Bark is necessary for the protecting the trunk and maintaining tree health

- ❖ Keep car doors, dogs, and bicycles away from the trunk to avoid potential bark wounds
- ❖ If you lay dry brick or stone around your tree, keep the material at least 100mm away from the trunk and check each year to maintain this space (pavers placed too close to the trunk can pinch the bark as the trunk gets wider)

REMOVE STAKES AND STRAPS

Tree straps left on your tree for longer than one year may cut into the bark and prevent proper trunk development.

- ❖ Remove and discard stakes and straps one year after planting

CULTIVATE

Cultivate the soil around your tree encourages water and air to enter the soil

- ❖ Spring is a good time to cultivate the soil around your tree
- ❖ If the soil around your tree becomes compacted, loosen the first few millimetres of soil and break up any large clumps (do not damage any shallow tree roots)

MULCH

Mulch helps conserve water, controls weeds, and prevents soil compaction.

- ❖ Maintain a 102 mm layer of mulch around your tree, taking care not to pack it against the trunk
- ❖ Mulch after cultivating and, if necessary, apply a fresh layer later in the season.
- ❖ Recommended mulches include: wood chips, composted leaves and pine needles.

PRUNING YOUNG TREES

WHY PRUNE?

- ◆ **PRUNE FOR HEALTH** - BY REMOVING DEAD, DISSEASED, OR DAMAGED BRANCHES.
- ◆ **PRUNE FOR APPEARANCE** - BY REMOVING UNHEALTHY BRANCHES AND BALANCING THE OVERALL SHAPE OF THE TREE.
- ◆ **PRUNE FOR SAFETY** - BY REMOVING BRANCHES THAT COULD FALL FROM THE TREE OR ARE IN THE WAY OF CARS OR PEOPLE.

WHAT TO PRUNE?

FIRST GIVE ATTENTION TO THE 3 D'S

- ◆ **DEAD BRANCHES** - ARE BRITTLE BRANCHES LACKING GREEN LEAVES IN SUMMER THAT ARE BROWN, RATHER THAN GREEN, UNDER THE BARK.
- ◆ **DAMAGED BRANCHES** - ARE BROKEN, FRACTURED, OR STRIPPED LIVING BRANCHES.
- ◆ **DISEASED BRANCHES** - IDENTIFIED BY CANKERS, GAULS, OR DEAD LEAVES, ARE THOSE INFECTED BY FUNGI OR BACTERIA.

THEN LOOK FOR OTHER BRANCHES TO REMOVE

- ◆ **STUBS** - BRANCH BASES LEFT AFTER A BRANCH HAS BEEN BROKEN OFF OR IMPROPERLY PRUNED. REMOVE THESE TO THE BRANCH COLLAR.
- ◆ **SUCKERS** - ARE THIN STEMS THAT GROW OUT FROM THE BASE OF THE TRUNK.
- ◆ **WATERSPROUTS** - RESEMBLE SUCKERS BUT GROW STRAIGHT UP FROM THE BRANCHES. THEY OFTEN APPEAR AS A RESULT OF IMPROPER PRUNING.
- ◆ **HANGERS** - ARE DOWNWARD POINTING BRANCHES THAT ARE BENT OR DEFORMED.
- ◆ **LOW BRANCHES** - THESE BRANCHES ARE NORMALLY FOUND AT THE BOTTOM OF TREES AND GET IN THE WAY OF PEOPLE AND CARS.
- ◆ **COMPETING LEADERS** - OCCURS WHEN MORE THAN ONE CENTRAL BRANCH RUN PARALLEL AND ARE OF SIMILAR SIZE. SELECT THE STRONGEST AND MOST CENTRAL BRANCH TO THE MAIN LEADER, AND REMOVE OR SHORTEN COMPETING BRANCHES.
- ◆ **CROSS BRANCHES** - ARE TWO BRANCHES THAT RUB AGAINST EACH OTHER OR WILL EVENTUALLY DO SO AS THE BRANCHES GROW IN THICKNESS. GENERALLY THE WEAKEST BRANCH IS REMOVED.
- ◆ **CROWDED BRANCHES** - OCCUR WHEN BRANCHES ARE TOO CLOSE ALONG THE TRUNK. THESE MUST BE REMOVED OR THEY WILL GROW INTO EACH OTHER.

- ◆ **BRANCHES WITH NARROW CROTHCH ANGLES** – OCCURS WHEN UPPER ANGLE BETWEEN THE BRANCH AN DTHE TRUNK IS LESS THAN 20 DEGREES. REMOVE THESE BRANCHES WHEN POSSIBLE AS THESE WILL GET DAMGED BY HIGH WINDS:

WHEN TO PRUNE?

IN GENERAL A TREE CAN BE PRUNED ANY TIME OF THE YEAR. THE BEST TIME, HOWEVER, IS LATE WINTER OR EARLY SPRING BEFORE THE NEW GROWTH BEGINS AND THE BRANCH STRUCTURE CAN BE SEEN.

HOW TO PRUNE?

REMEMBER:

- ◆ EVALUATE FIRST, PRUNE SECOND.
- ◆ AVOID TEARING BARK.
- ◆ NEVER LEAVE A STUB.
- ◆ THINK ABOUT SAFETY.

ALWAYS PRUNE BACK TO:

- ◆ HEALTHY WOOD.
- ◆ A BUD OR BRANCH FACING TOWARDS THE OUTSIDE OF THE TREE.
- ◆ THE BRANCH COLLAR.

PRUNING SMALLER BRANCHES WITH A HAND PRUNER

WHEN USING A BY-PASS TYPE HAND PRUNING SHEARS PLACE THE CUTTING BLADE NEXT TO THE STEM TO MAKE THE CLOSEST AND CLEANEST CUT.

PRUNING LARGER BRANCHES WITH A SAW.

USE THE THREE CUT METHOD FOR LARGER BRANCHES.

1. USING A HAND SAW MAKE THE FIRST CUT ON THE UNDERSIDE OF THE BRANCH, SEVERAL CENTRMETRES OUT FROM THE TRUNK, CUTTING UPWARDS UNTIL THE TWO PARTS OF THE BRANCH BEGIN TO BIND THE SAW BLADE. THIS UPWARD CUT WILL PREVENT THE LIMB FROM TEARING AWAY THE TRUNK'S BARK AS THE LIMB BEGINS TO FALL.
2. THE SECOND CUT IS THEN MADE FROM THE UPPER SIDE OF THE LIMB, THOUGH YOUR FIRST CUT.
3. NOW, LOCATE THE BRANCH COLLAR CLOSE TO THE TRUNK AND CAREFULLY CUT JUST BEYOND THE COLLAR. THE BRANCH COLLAR IS THE SWOLLEN AREA AT THE BASE OF THE BRANCH. YOU DO NOT WANT TO CUT INTO THE COLLAR AS IT PROVIDES A CHEMICAL BARRIER TO DECAY AND ENSURES AS SMALL A WOUND AS POSSIBLE. IT IS NOT NECESSARY TO PAINT TREE WOUNDS.