Tree Policy
2020-2030

March 2020

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southend onsea BOROUGH COUNCIL

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Tree Policy

Foreword

Southend-on-Sea Borough Council directly manages many thousands of trees growing along its roads, in its parks and gardens and woodlands.

Trees are an essential part of the environment and vital to healthy urban living. At a time of growing awareness of global climate change, trees and the care of trees is more important than ever. The council has been committed to the responsible management of the borough's trees and has been planting trees in the town since the start of the 20th century.

This tree policy reaffirms the council's ongoing commitment to responsible tree management and to maintaining and enhancing the town's canopy cover. Tree canopy cover is sometimes referred to as urban canopy cover and also urban tree canopy cover. All of these terms refer to the area of leaves, branches and stems of trees covering the ground when viewed from above (Grove et al., 2006) and is expressed as a percentage.

Summary of the Aims of the Policy

Trees bring many benefits to the town and its residents.This policy document describes the current tree population in Southend-on-Sea and how these trees will be managed, inspected and maintained. It sets out how and why trees are pruned, the circumstances when they will not be pruned and the reasons why trees sometimes have to be removed.

The policy affirms a presumption against the removal of healthy trees subject to complaints unless the basis of a complaint has an over-riding justification and no alternative management practice is practicable.

The Council will take steps to protect its trees from threats such as the activities of statutory undertakers (including gas, water, electric and communications) and other excavation activities or building works.

There will be a continuation of street tree planting, in suitable sites, to help maintain and extend the tree canopy cover across the borough.

The policy will be reviewed and updated regularly to reflect changes in national legislation and developments in arboricultural best practise.

Why do we need a tree policy?

Trees play an important role within an urban environment. There has been extensive research in recent years demonstrating the significant benefits trees bring to our physical and mental health, our social and economic wellbeing, to biodiversity, to the air we breathe, and the soil beneath our feet. They help offset the effects of heavy rainfall, helping to mitigate flood risk, and offset the urban heat island effect. They capture and store carbon and particulates which pose an increasing risk to human health.

This strategy sets out the council's approach to the management of its trees for the overall benefit of the borough and its residents.

Trees bring beauty to the town but it is central to the management approach that they are not simply considered individually as aesthetic objects, but recognised as a key element of the town's green infrastructure essential to the quality of life in Southend-on-Sea.

This strategy sets out the council's commitment to protect, enhance and maintain trees in the town. It describes how this commitment will be delivered and measured.

Aims and Objectives

The council recognises the significant value of trees as part of the town's green infrastructure. Green infrastructure is defined as the network of green spaces and features including parks, playing fields, woodlands, street trees, private gardens, rivers, streams and foreshore. This infrastructure is an integrated network of spaces which work together to provide multiple benefits. The benefits gained from trees in an urban landscape are set out later in this document. The key aims and objectives of this policy are:

1. To manage the current tree stock as an urban forest in accordance with sound arboricultural practise.
2. To extend the overall tree canopy cover to 15% by 2050 by planting more trees each year than are removed.
3. To protect trees subject to Tree Preservation Orders (TPO's) and trees in Conservation Areas, ensuring that they are retained and protected in accordance with BS5837 on all development sites.
4. To promote greater awareness and knowledge of trees, their value and management
5. To encourage the community and local businesses to plant trees on their own land and to get involved in public tree planting initiatives.

These objectives will be delivered through the actions and policy statements in this Tree Policy.

Where are we now ?

Southend-on-Sea Borough Council maintains many thousands of trees across the borough on various sites including:

- Highways
- Parks and open spaces
- Woodlands
- Cemeteries, crematorium and closed church yards
- Council owned land
- Council housing areas

The Arboricultural Section of the council directly manage trees or advises on the management of all trees except those on council housing land which are currently managed by South Essex Homes.

Overview

The tree population across the town are varied in terms of the mix of species, age and condition. At the start of the 20th Century it was common practice to plant streets with a single species of tree. This can still be seen today in areas of Westcliff and Central Southend which are characterised by mono-cultures of London plane and lime. These would have been amongst the first trees to be planted in the town and many of these are now maintained as pollards. Other species such as horse chestnut, ash and Norway maple commonly occur as pollarded specimens and characterise some of the older plantings. These days many of these 'forest' species would not be chosen as they outgrow the space available.

In more recent years, many different types of trees have been planted as more species and cultivars have become available. This has given rise to a greater variety of species and varied age groups across the town. The annual tree planting programme adds further new species each year.
Many of the town's parks and green spaces have fine mature trees within them. Planting has been continuous over the years and in many parks and open spaces good tree cover is present.

Tree Asset Database

The vast majority of trees under the direct management of the Arboricultural Section are recorded on the tree management database. At the time of writing 29,242 individual trees are recorded within our highways, parks and gardens. The information is recorded and updated at the time an individual tree is inspected, when a tree is removed and when new trees are planted.

Canopy Cover

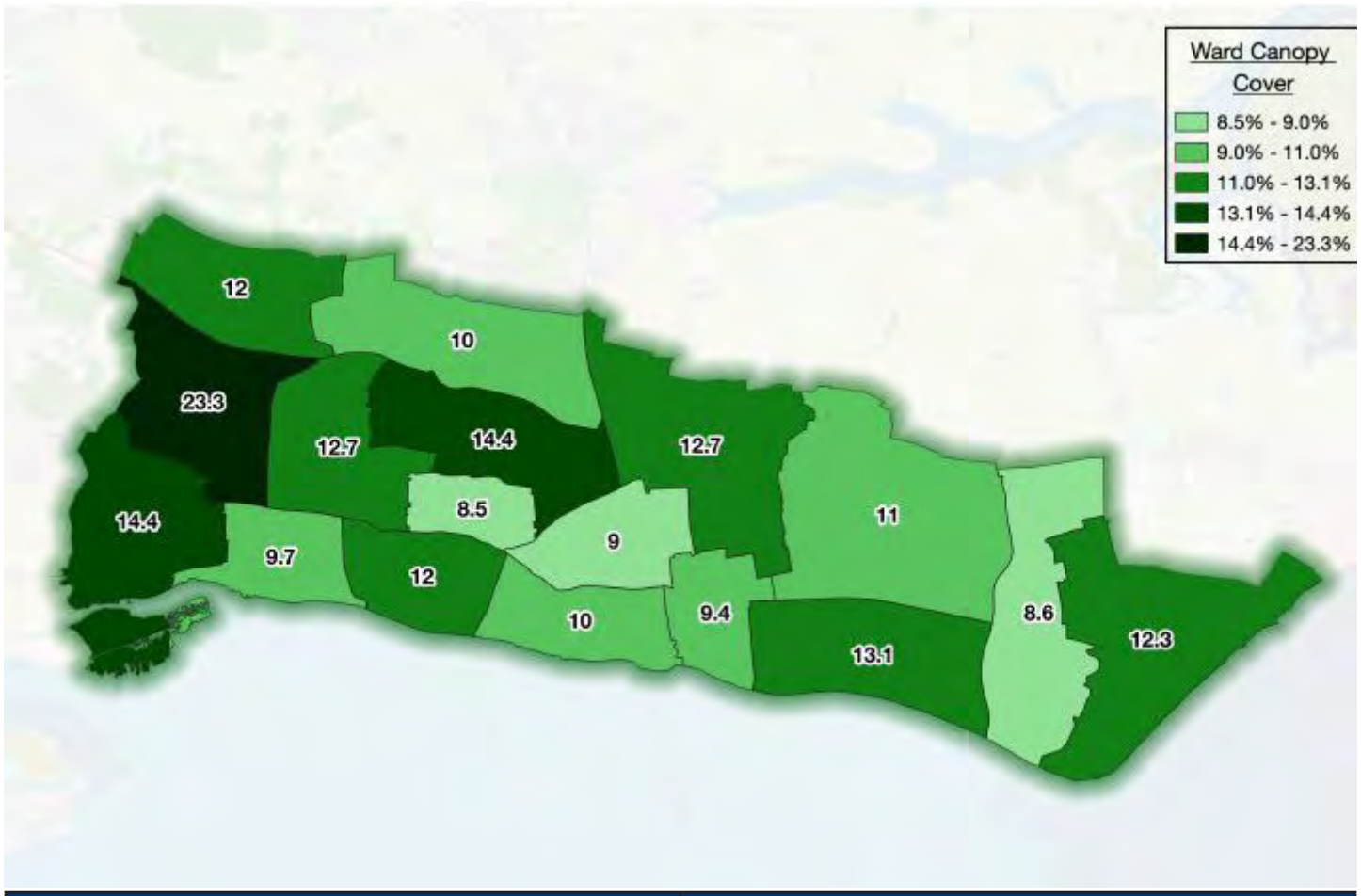
A report was commissioned by Southend-on-Sea Borough Council in October 2019 to quantify the tree canopy cover within the borough and by each council ward. Tree canopy cover can be defined as the area of leaves, branches and stems of trees covering the ground when viewed from above. It is a two dimensional measurement of the spread of canopy cover over a given area. Repeat assessment of the canopy over time can provide an effective means of monitoring the tree population, setting targets and tracking the effectiveness of planting programmes.

At October 2019 the canopy cover of the entire borough was measured at 12%. This includes both council-owned and privately owned trees. The cover ranged from a high of 23.3% in Belfairs Ward down to 8.5 % in Westborough Ward. This reflects the high density tree population growing in Belfairs Park and Nature Reserve as compared to the very urban nature of wards such as Westborough where hard surfaces are the predominant ground material.

In comparison with other studies (Urban Tree Cover, 2018), the canopy cover in Southend-on-Sea is below the national average of 17% which was estimated in the 320 towns and cities surveyed in the UK. However, in general it can be said that coastal towns have lower canopy covers. A baseline study of canopy cover in the UK found that 20 out of 30 coastal towns had a canopy cover below 10% and the average canopy cover was 13.7%. (Treeconomics 2019).

The reason for this reduced tree canopy cover in coastal regions is that they have their own particular climate; there is less rainfall than there is inland, the sun shines longer and the wind is usually stronger with powerful gusts. The salt that the sea wind brings with it also means the trees are prone to dry out more quickly.

The overall canopy cover of an area can be affected by the presence of agricultural land, industrial estates and other commercial land, school playing fields, car parks and the presence of underground services along the highway.

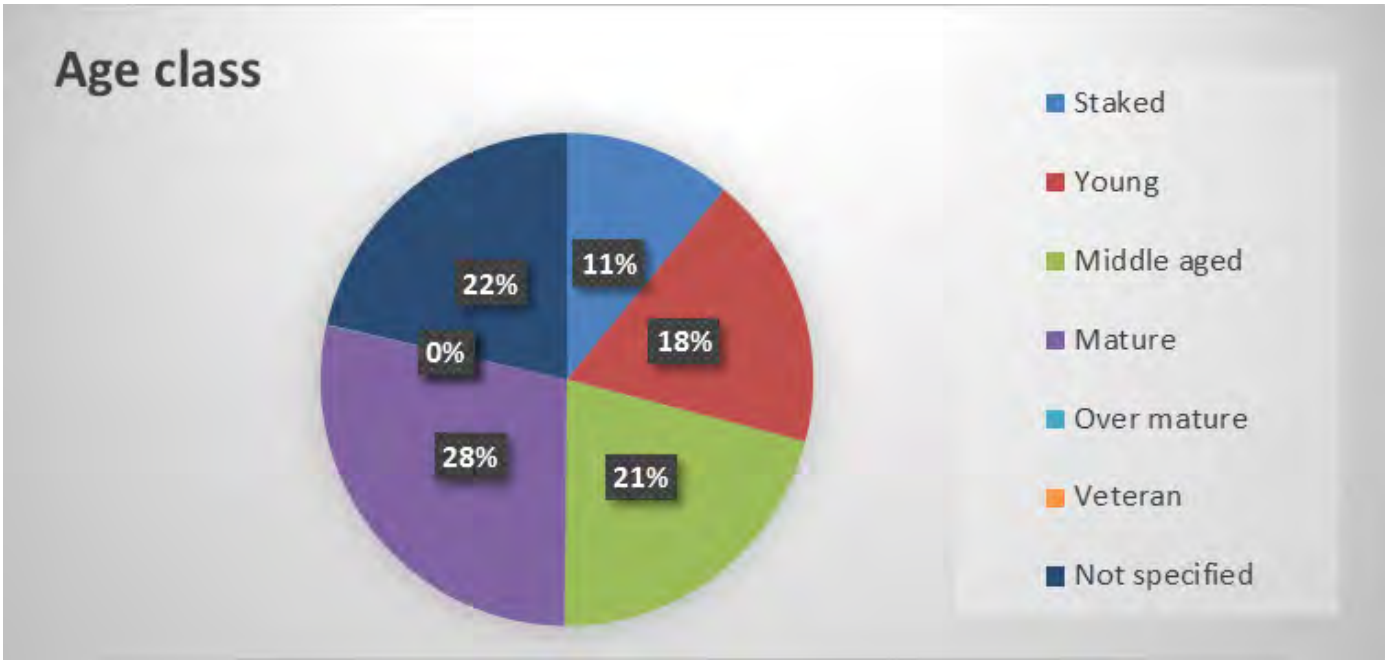


Ward	Tree Canopy Cover (%)
Belfairs	23.3
Blenhiem	12.7
Chalkwell	12.0
Eastwood Park	12.0
Kursaal	9.4
Leigh	9.7
Milton	10.0
Prittlewell	14.4
Southchurch	11.0
Shoeburyness	12.3
St Laurence	10.0
St Lukes	12.7
Thorpe	13.1
Westborough	8.5
West Leigh	14.4
West Shoebury	8.6
Victoria	9.0
Borough of Southend Average	**11.95**

Age Classification

A diverse age classification exists amongst the recorded tree stock. Where age class is recorded 29% are staked or young trees, 21% middle aged and 28% mature.
The data available indicates an uneven age structure is present. This is a desirable trait of a tree population to allow for continuous cover.

As many of the trees are staked, young or middle aged this would indicate the canopy cover in the Borough can be expected to increase as these trees grow and planting is continued.



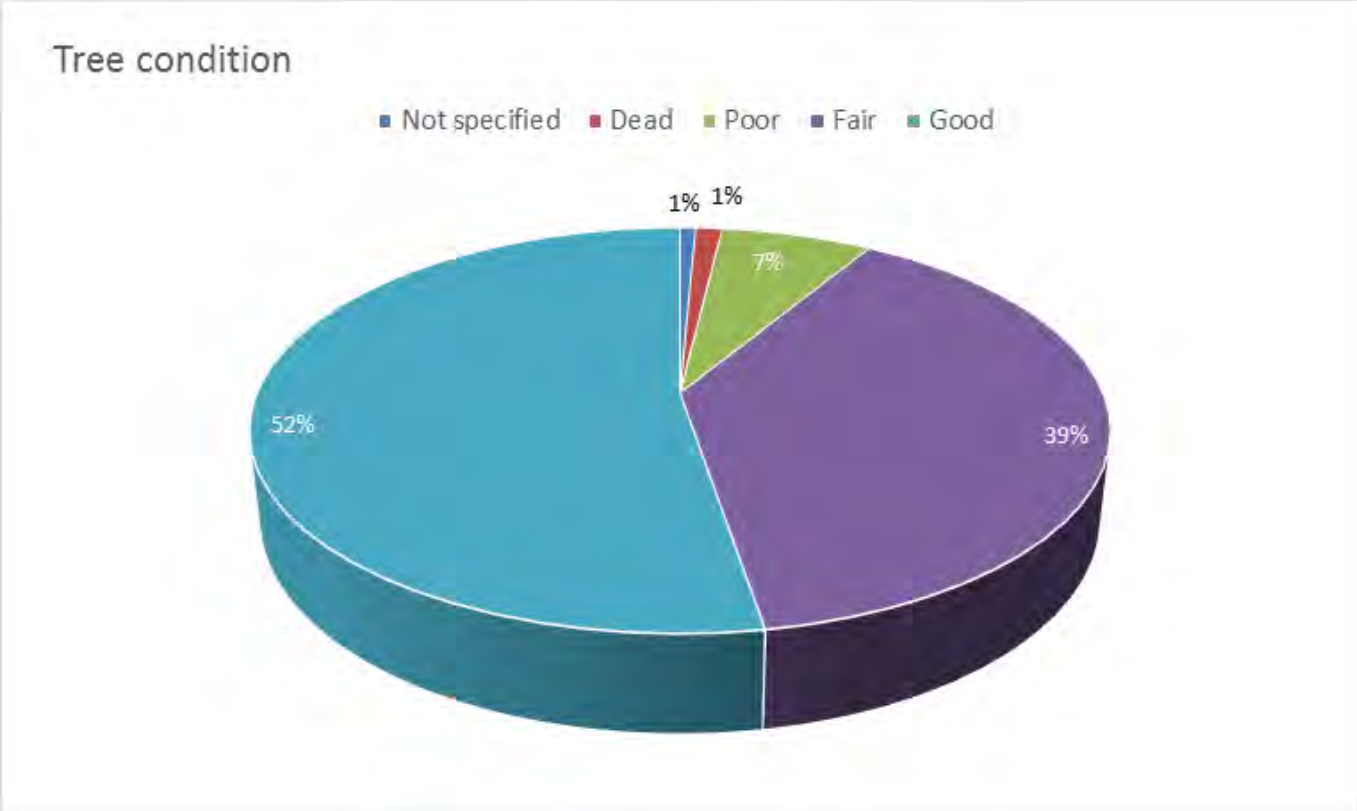

Priory Park Gardens

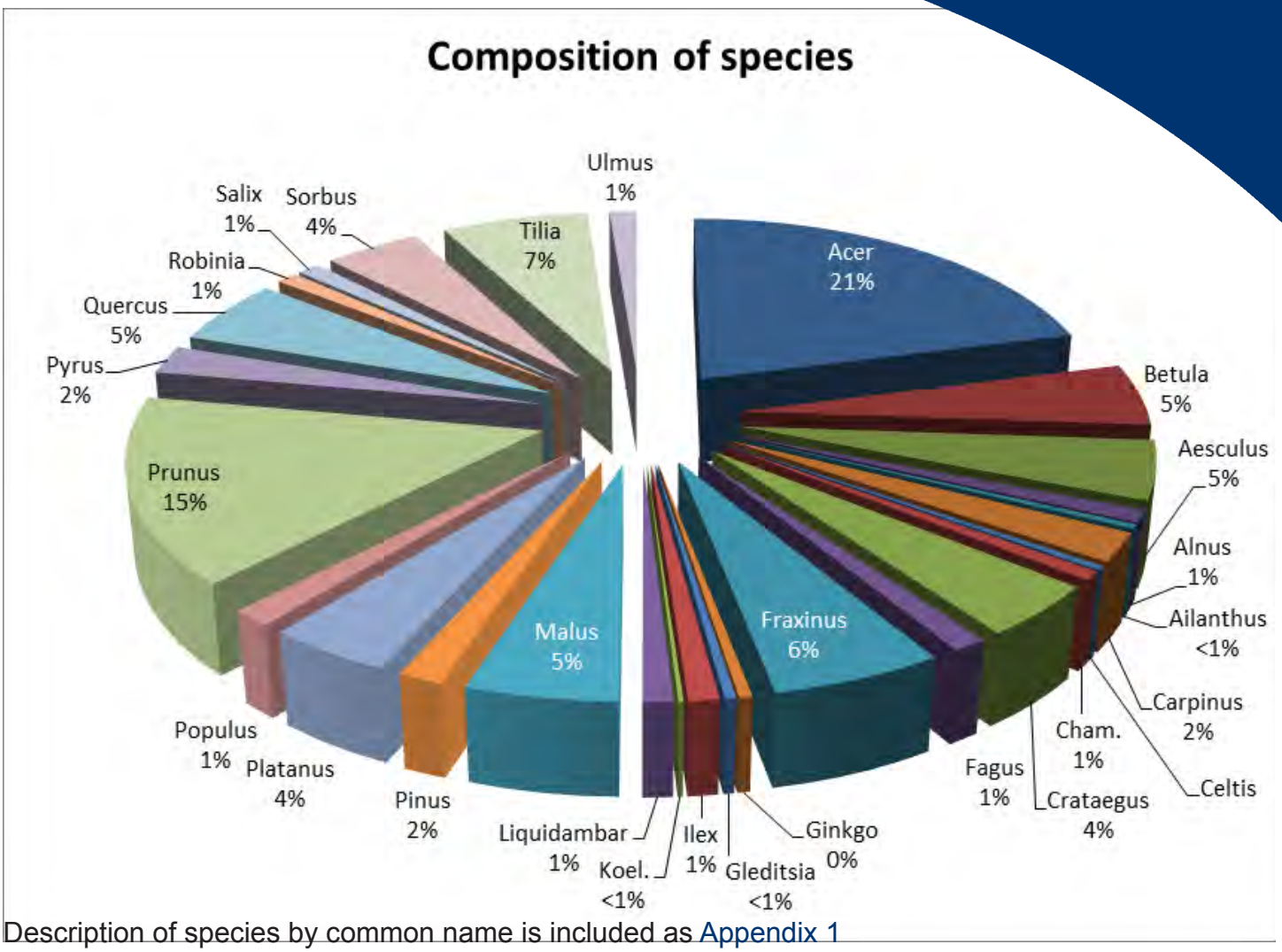

Priory Park

Tree Health

Urban trees, especially street trees are generally growing in an alien environment. They can be subject to many stresses, such as pollution, bark damage, increased heat, water availability, salt damage, soil compaction as well as the activities of utility companies and vandalism.

The data available would indicate that the overwhelming majority of trees were found to be in fair or good condition at the time of inspection.



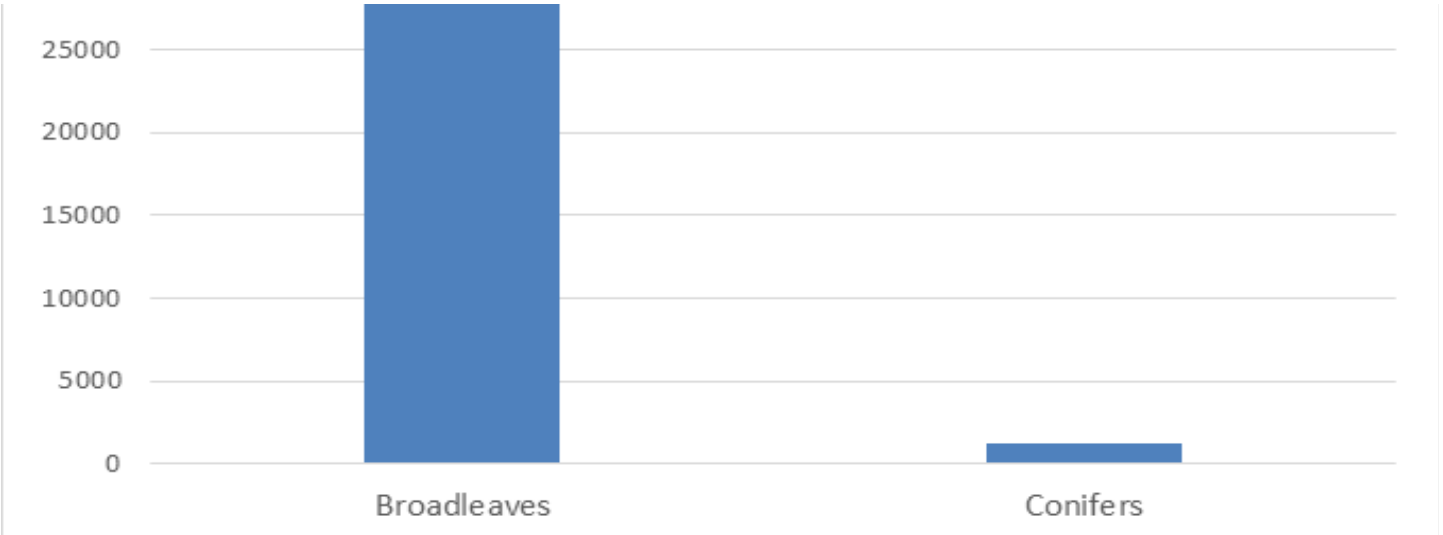


Description of species by common name is included as Appendix 1

Broadleaved and Coniferous Trees

It is to be expected that broadleaves will outnumber conifers within our tree population. Evergreen conifers are useful for removal of pollutants and opportunities for planting should be sought. Their form, especially when young, generally makes them largely unsuitable as street trees. They are less amenable to pruning, create site line obstructions, are subject to leaf fall throughout the year and produce shade all year. The opportunities for park and larger verge planting should be considered..

From the data available it would indicate the overwhelming majority of trees were found to be in fair or good condition at the time of inspection.



Policy Context

National Policy

National Planning Policy Framework
The national planning context is provided by the National Planning Policy Framework (NPPF) as updated in February 2019. This framework sets out the Government's planning policies for England and how these are expected to be applied. The role played by trees and woodland is intrinsically linked to a number of sections of the revised policy, namely

- Promoting healthy and safe communities
- Creating attractive, welcoming and distinctive places to live, work and visit
- Conserving and enhancing the natural environment
- Building a strong, competitive economy
- Ensuring the vitality of town centres
- Promoting sustainable transport
- Meeting the challenge of climate change, flooding and coastal change
- Conserving and enhancing the historic environment

Local Policy

Local Planning Framework
Southend-on-Sea's Core Strategy Development Plan Document (DPD) was adopted in December 2007. This sets out the council's spatial strategy and strategic planning policy framework for the borough.

The 'Development Management' Development Plan Document, adopted in 2015, provides more detailed policy information. It states that all new development that creates additional residential and/or commercial units should incorporate urban greening measures including tree planting. It highlights that the many benefits gained from planting and landscaping should be a major consideration at an early stage and should not be merely an afterthought or considered as purely a decorative element to be added once built structures are designed or constructed; that the use of plants and trees should be considered an integral part of every development.

It sets out how urban greening provides a wide range of benefits, including wildlife activity and connection, creates a positive sense of place, provides environmental protection for local communities, aids climate adaptation, and enhances quality of life providing health and recreational benefits. Furthermore it contributes to the emergence of a continuous linked network of varied landscapes that begins at the 'front door' and connects with the wider area.

New Local Plan
The emerging Local Plan identifies the significant pressures on local development. Government targets growth between 18,000 and 24,000 new dwellings and 10,000 – 12,000 new jobs in the next twenty years.

The first stage of consultation on the Local Plan Issues & Options document was undertaken between February and April 2019. It focuses on 12 key issues. Green infrastructure is relevant to many of these:-

Issue Three	Securing a thriving local economy
Issue Four	Promoting Southend as a major resort
Issue Five	Providing for attractive and vibrant town centres
Issue Seven	Facilitating good design, healthy living and built environment
Issue Eight	Providing Community services and infrastructure

Issue Nine	Enhancing our natural environment
Issue Ten	Planning for climate change

The most common comment in the consultation was a wish to see more trees and urban greening in the town centre.

Southend's Vision 2050

Trees and woodland contribute to four of the five key aims of the Southend 2050 vision.

Pride and Joy

Our street and public spaces are clean and inviting

Trees make our streets, green spaces and commercial areas more inviting and attractive.
The presence of trees and other green infrastructure improves the attractiveness of an area helping encourage people to visit and take pride in the town.

Community tree planting projects help to bring the community together to enhance their public spaces.

Safe and Well

We act as a Green City with outstanding examples of energy efficient and carbon neutral buildings, streets transport and cycling.

Green infrastructure in our streets improves the climate resistance and visual appearances of the urban landscape. Increased greening and improving the proportion of green space benefits the urban environment.

Trees are central to a cohesive approach to green infrastructure which brings significant benefits to mental, physical and social well-being.

Looking after existing trees and planting new ones helps the town with its green aspirations and helps with air quality, surface water management and reduces the urban heat island affect, which in turn reduces the need for air conditioning.

Active and Involved

A range of initiatives help communities come together to enhance their neighbourhood and environment.

Community tree planting initiatives help the community come together to enhance their neighbourhood and environment. Young people and school groups can become involved in planting trees and shrubs to create new areas of wildlife habitat. These projects provide great opportunities to learn about trees and plants and the environment.

Opportunity and Prosperity

We have a fast-evolving, re-imagined and thriving town centre, with an inviting mix of shops, homes, culture and leisure opportunities.

Trees can help to create a town centre which is more attractive, healthier and enjoyable for all.

Trees will contribute to the successful delivery of key regeneration schemes.


The Benefits of Trees
Treeco2nomics
Increased property value and rental value
Improved recovery times from illness
Attractive high streets
Increase in consumer spending and restaurant patronage
Reduced air-conditioning costs
Improved concentration and productivity
Winter windbreak
Stormwater attenuation
Evaporative cooling in hot weather
Reduced heating costs
• Social cohesion
• Sense of place
• Cultural links to the past
Bio-diversity and habitat
Oxygen production
Food
• Summer shade
• UV protection
Noise reduction
Air quality
Pollution filtration
Carbon storage
Traffic calming and journey quality
Encourages outdoor recreation
• Reduced surface flooding
• Soil infiltration
• Soil conservation
Timber
Fuel and building materials
• Reduced stress
• Health and wellbeing benefits

The Benefits of Urban Trees

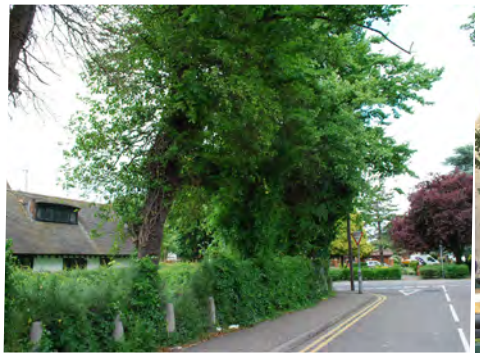
Trees provide many benefits and services and as such they are valued by people in their own gardens and also in the streets and park areas where they live. Trees on publicly owned land are valued by different people in different ways. Some of the benefits come from the attributes of a single tree, while others are derived from groups of trees functioning together. Here are some of the benefits that we may enjoy from our local trees in Southend.

1. **Being near trees is good for our health** Japanese studies in 2009-2012 showed that being in the presence of trees (a pastime they named forest bathing) is proven to lower heart rate and blood pressure (Park, JB et al, 2010), reduce stress hormone production, boost the immune system (Qing-yan Li, Maiko Kobayashi et al 2009) and improve overall feelings of wellbeing (Park, JB et al, 2010). City and town residents can also benefit from regular visits to a park or green space with even brief exposure to greenery reducing stress levels s (Tyrväinen, L., et al 2014). As it is now estimated that over 70% of people are now living in urban environments the importance of trees and green spaces within these urban areas is increasing as their benefits to us are still being discovered. The NHS has recognised that patient recovery rates can be improved by the presence of trees by introducing the NHS Forest project, https://nhsforest.org

2. **Better air quality** Trees absorb the greenhouse gas carbon dioxide as well as air pollutants such as nitrogen dioxide, sulphur dioxide and ozone and are able to intercept harmful particulates from vehicle engines, smoke, dust and pollen. In addition to this they produce and release oxygen via photosynthesis. Combined these tree functions help to reduce the incidence of diseases aggravated by airborne pollutants. (G., Quinn, J. et al 2008, and Stewart, H. et al 2002.)

3. **Provide natural beauty which softens the hard urban landscape** Trees and other vegetation break up the straight lines of roads, buildings and street furniture providing an attractive counterpoint. As such trees enhance the liveability of urban roads and streets as they are not just thoroughfares for vehicles but also serve as public spaces for people to walk, shop, meet and participate in activities.

4. **Can be a tool for traffic calming** Commuting by car can be a stressful experience of urban life. Trees and landscape along the sides or centre of roads can have a positive effect on driver behaviour and perception, resulting in safer roads. Drivers who have views of vegetation and trees



show reduced levels of stress and frustration compared to those driving though built up areas with no vegetation and landscaping (Parsons, R., et al 1998). There has also been research carried out which suggests that trees may improve driving safety. Trees in urban roadsides may be associated with reduced crash rates as it is thought their presence may produce a psychological cue to drive more slowly (Mok, J.-H., et al 2006).

5. **Can help reduce flooding**. The frequency and severity of flooding events has increased in the UK over recent years. Buildings and roads together with areas of compacted soil around urban settings are much less permeable to rainfall than natural land covers. For this reason water runs over these surfaces more quickly, often stripping off topsoil, to enter rivers, streams and brooks which can then burst their banks. Or surface water can cause flooding as it is unable to easily penetrate the ground. Trees, hedgerows and woods can be part of the solution. Strategic planting can have a positive impact in areas experiencing floods from waterways and surface run off. Trees are able do this in the following ways.
   - The canopy of the tree directly intercepts rainfall which will either drip from the leaf surface, run down the twigs, branches and trunk and see into the ground, or may evaporate from the leaves later on.
   - Under the tree canopy roots grow outwards creating minute channels in the soil through which rain water can penetrate more quickly and deeply so that flooding is less likely.
   - By absorbing water during the growing season trees near catchment areas reduce the pressure on drainage systems in urban areas.
   - Trees, shrubs and even deadwood along the banks of streams and brooks act as break on flood waters, holding back water and slowing the flow during heavy rainfall. (Soltis D. 1997)

6. **Reduction in noise pollution** In urban areas noise can reach unhealthy levels. Many towns and cities have acknowledged the impacts of this increasing environmental issue and taken action to address noise pollution. By strategic planting and landscaping, trees and other plants can be used to improve the situation as leaves, branches and trunks help to scatter and absorb sound waves. Trees also provide 'white noise' by the movement of their leaves and branches in the wind. This noise helps to mask other man-made noises nearby.

7. **Benefits to wildlife** Trees are living systems that interact with other living things which share and recycle resources. Trees provide food and shelter for wildlife especially insects and birds. In urban areas they are an important source of nectar for pollinators, notably bees. (RHS 2015)

8. **Reduce the heat island effect** Urban heat islands describe how average temperatures are higher in built up areas than the surrounding rural land. They exist because of decreased wind, increased high density hard surfaces and through heat generated by human activities. Trees can be successfully used to mitigate heat islands as they provide shade making streets and buildings cooler in the summer, and they dissipate heat through the release of moisture which cools the air (Mayor of London, London's Urban Heat Island, 2006).

9. **Food.** In woodlands, parks and towns trees provide fruit, berries and nuts.

10. **Fuel.** As a by-product of tree management and coppicing trees will provide biomass for domestic heating and industrial production of heat, electricity and biofuels. Solid fuel burning produces an invisible, ultra-fine particulate matter (PM2.5) pollutant which is harmful to human health. Short and long-term exposure to PM2.5 increases the risk of early deaths from respiratory and cardiovascular diseases as well as increased hospital admissions. The Clean Air Act says that you must not emit "dark smoke" from your chimney if you live in a smoke control area. Changes in legislation in 2021 will phase out the use of polluting solid fuels including wet or 'green' wood in favour of cleaner alternatives such as dry or seasoned wood with a moisture content of less than 20%.

11. **Timber.** Trees provide a sustainable source of timber for construction.

12. **Social development.** Trees and woods can help to bring people together and strengthen communities through volunteering. The involvement of people in the practical activities of planting and caring for local trees and woods can build a stronger sense of ownership and civic pride.

13. **Education.** Trees and woods can be used as an educational resource which can be linked to the national curriculum. Easy access to trees and woodland provides an invaluable facility for both formal and informal learning in the urban environment. The Forest School movement pioneered an innovative approach to outdoor education which demonstrated significant benefits to personal development and learning. The increasing number of Forest schools build self-esteem and confidence through regular visits to woodland sites. Children learn to appreciate nature, to practice and master tasks and acquire associated social skills.

14. **Improved property values.** Research has shown that trees can provide significant benefits for property owners by increasing property values and selling prices.



Street Trees in Leigh

Tree Management

The council has a legal responsibility to manage its trees.
The principle areas of legislation relating to tree risk management are:

The Occupiers Liability Acts 1957 and 1984
The Highways Act 1980
The Health and Safety at Work Act 1974
The Local Government (Miscellaneous Provisions) Act 1976

Tree Inspections

Southend-on-Sea Borough Council own and maintain many thousands of trees throughout the Borough. Statutory obligations dictate how the Council must manage trees that are within areas of its control; these are principally the Highways Act 1980 and the Occupiers' Liability Act 1957 & 1984. Statutes such as The New Roads and Streetworks Act 1991; Health and Safety at Work Act 1974 and the Wildlife and Countryside Act 1981 govern how contractors working within the Borough must operate. The Town and Country Planning Act 1990 places a duty upon the Council to assess the impact of tree loss within the Borough; where the loss is likely to have a significant impact upon the local and wider landscape the Local Authority must consider protecting trees through the Tree Preservation Order (TPO) process.

Who inspects council managed trees?

The council's Arboricultural Officers carry out proactive and reactive inspections. The Arboricultural Officers are qualified to at least National Qualification Framework Level 4 in Arboriculture. Qualifications can include Professional Tree Inspection Certificate, Technical Certificate Arboriculture, Bachelor of Science etc.

Trees and risk

The council has a statutory duty of care under the Health and Safety at Work Act 1974 and the Occupiers Liability Act 1957/84 to ensure that members of the public and staff are not put at risk because of any failure by the council to take all reasonable precautions to ensure their safety.

There is a need to inspect trees in or near public places, or adjacent to buildings or working areas to assess whether they represent a risk to life or property, and to take remedial action as appropriate.

Inspection methodology

Visual Tree Assessment (VTA) (Mattheck & Breloer 1994) is the industry recognised method for tree inspection. This method is used by the council Arboricultural Officers.

Inspections are recorded on the council's tree management database. The tree management system currently used is Ezytreev. This system is able to record each tree inspection and also any works to be carried out.

The Borough is divided into three areas, west, central and east. Each area has an Arboricultural Officer assigned to it.

Why inspect trees?

Generally trees are inspected, at a frequency set out in this policy, to monitor their structural and physiological state to ensure they are in an acceptable condition for their location. Highway trees are also inspected to ensure they are not impeding the passage of vehicles or pedestrians. Additional inspections will be undertaken if a valid customer enquiry is received or an incident occurs, to assess if remedial works are required.

Proactive tree inspection has the benefit of building a picture of the tree stock so its species make up, age class and condition is known. Proactive tree inspection should also identify those trees which have irremediable defects or have reached the end of their safe useful life expectancy this could mean that they are growing poorly, offering reduced amenity value, adversely affecting other, and better trees. These trees can then be removed and replaced.

Trees may be inspected for the following reasons.

- Proactive-as part of the cyclical tree inspection regime for highway and parks trees.
- Reactive-in response to a valid customer enquiry.
- In response to a planning application.
- To carry out a tree risk/benefit analysis. To ascertain whether a beneficial defective part of a tree can be safely retained in its situation. For example whether dead wood can be retained as a valuable habitat. This will be done by considering the severity and likely impact of failure.
- To assess either amenity or monetary value of a tree or group of trees. This would normally only be done as the result of a planning application or development which if approved would mean the loss of one or more healthy trees.

Levels of inspection

Various levels of inspection take place, both formal and informal.

Formal inspections:

- Walk over surveys. Examples being for the removal of basal and epicormic growth within a street, (this is the removal of shoots growing from the base and on the trunk of the tree) or to identify trees which require closer inspection within wooded areas where individual tree inspection is not practicable due to tree numbers.
- Detailed inspection: where tree data is recorded via hand held device and works recommendations made. Individual trees will be inspected using VTA, probes and sounding mallets or similar. These hand tools help to evaluate obvious decay pockets and cavities and to assess wood intergrity via sound.
- Advanced inspection using decay mapping drills or tomography.

Informal inspections:

- Defects noticed by parks staff for example whilst carrying out daily tasks.

Parks staff may also report issues to Arboricultural Officers for further inspection.

Frequency of inspection

Highway trees

Highway trees are divided into 2 main inspection regimes, quiet roads and principal roads. The vast majority of highway trees are recorded on the tree management database.

Quiet roads
These are generally minor roads which buses do not use where the speed limit is normally 30mph or below. The aim is to carry out a detailed inspection of the trees alongside quiet roads every 3 years as part of the cyclical maintenance regime.

Principal roads
These are generally bus routes or major roads such as dual carriageways. These roads will have greater vehicular use and often have speed limits beyond 30mph.The aim is to carry out a detailed inspection of trees alongside principle roads every 2 years as part of the cyclical maintenance regime.

Green Spaces
Trees in green spaces which includes parks, open spaces, cemeteries and closed churchyards also require inspection to ensure they do not pose unacceptable risks to users. At present the majority of trees within the larger parks and open spaces of the borough are recorded on the tree management database.

Further work is required to ensure all parks' trees or tree groups are recorded and to fully develop a robust inspection regime. This will be in line with recommendations made by the National Tree Safety Group.

Green spaces will be allocated a 'usage zone' either, high, medium or low to inform frequency of inspection. This usage zone will be informed by visitor use and events which are held in parks. We aim to have all trees within parks and open spaces on the tree management data base and an inspection regime in place by April 2021

Woodlands
It is impractical to inspect every individual tree within woodlands and unnecessary as the vast majority of trees in woodlands have very low footfall or use beneath them.

Woodlands, or parts of woodlands will also be zoned for low, medium or high usage and inspection type and frequency will then be implemented by April 2021.

Examples of usage zones in the context of green spaces
- High: a main park, area within a park or open space which hosts lots of events with many visitors and large trees.
- Medium: a main park or area within a park, or open space without regular events and lower use.
- Low: informal open spaces with low tree cover or groups of scrub.
- No formal inspection: minor trails within woodlands or areas with little public access.

Tree Risk Assessment

The current system used where necessary is Quantified Tree Risk Assessment (Q.T.R.A.). This system is currently used by The Arboricultural Section to set inspection frequencies within woodlands and parks.

When do we prune trees?

Trees can be pruned and removed at any time of year but it is good practice only to carry out heavy pruning, for instance pollarding and crown reduction pruning works, in the winter and summer. During autumn and spring the sap flow within the tree is at peak levels. It is best to avoid major works during these two periods as this will benefit the health of the tree. In the spring the buds burst and sap flows

up and into the new leaves so it is best to wait until the leaves have fully flushed and hardened before any pruning is carried out. In the autumn the tree is withdrawing sugars from the leaves and storing it before they drop so waiting until winter is recommended.

The most common pruning operation carried out on Southend's street trees is a maintenance prune. This involves the removal of minor branches to maintain safety for road users and pedestrians. Growth at the base of the tree which could obstruct pedestrians is removed as are any dead or low hanging branches which could impede vehicles or pedestrians. This type of pruning work can be carried out any time of year.

Why do we prune trees?

A tree growing in a rarely visited field can be left unpruned to grow as nature dictates. However trees that we plant in our parks, open spaces and highways have to be inspected and maintained by pruning when necessary. The main reason for this is the duty of care that Southend-on-Sea Borough Council has towards its residents and visitors. They must be able to go about their lives safely amongst the thousands of street and parks trees. You may think that trees just look after themselves but the Council carry out routine inspections followed by a rolling programme of maintenance pruning. Not every tree will require pruning after an inspection. Unless there is a potentially hazardous structural defect in the tree it is best to prune it a little as possible as removing branches and foliage reduces the ability of the tree to photosynthesise (produce sugars) which can put the tree under stress. However some trees are able to tolerate extremely heavy pruning such as pollarding where the entire crown is removed. This can be carried out on trees such as London plane and lime trees. Generally this is carried out where trees are located in situations where it is not possible to allow them to grow into their full dimensions since they are too close to buildings and roads.

Reasons why trees are pruned

- To remove low growth obstructing vehicles in the carriageway
- To remove low growth obstructing pedestrians using the public footway
- To remove or reduce branches obstructing a clear view of street signs, road warning signs and traffic signals
- To remove or reduce branches interfering with street lighting and Southend-on-Sea Borough Council CCTV cameras
- To remove or reduce branches touching a nearby building
- To remove or reduce branches pushing heavily against overhead telephone cables
- To remove dead, decaying, diseased, damaged or defective branches
- To reduce the size of the crown where a tree has become too large for its location in the view of the council's Arboricultural Officer.
- To reduce the size of the crown where a tree is proven to be implicated in subsidence damage to a nearby property
- To reduce the crown back to the previous pollard reduction points
- To improve the structure of the tree for long term health and retention
- In emergency situations where trees have been damaged by strong winds or they have been hit by vehicles so as to leave them in a hazardous condition.
- To prune back roots where they are causing disruption to nearby hard surfaces when it is safe to do so.
- To address privately owned trees where they pose a threat to highway users. The Council has a legal obligation to ensure that all trees located close to the highway do not pose such risks to highway users. Where privately owned trees pose unreasonable risks to highway users, the Council will contact the owner of the tree to request appropriate action is taken within a stated timescale. If this action is not taken then the Council has the legal powers of enforcement to ensure that the required work is undertaken. All costs will be re-charged to the owner of the trees.

When don't we prune trees?

- The tree is blocking TV and satellite reception. (A television licence is a permit to operate a television receiver, but it does not guarantee any reception or any legal right to a reception).
- The tree is blocking a view. There is no right in law to a view and the Council has no obligation to improve a view obstructed by a tree.
- The tree is causing shading. There is no legal requirement for tree owners to remove or prune their trees to improve the amount of light that reaches a neighbouring property.
- The tree is blocking sunlight reaching solar panels placed on a neighbouring private property.
- The tree is perceived to be too large. Usually species of tree are selected taking into consideration the eventual size that the tree can achieve. However in some instances the tree may outgrow the space available in the location so a crown reduction may be considered appropriate in order to retain the tree.
- The tree is considered to be producing too much pollen. Tree pollen can influence people who suffer from hay fever and other allergies. However the presence of trees has positive benefits to the environment which help to alleviate serious respiratory problems caused by poor air quality.
- The tree is lightly touching telephone lines. The Council will however prune back branches which are seen to be heavily rubbing against overhead cables.
- A tree will not be removed or pruned due to the presence of bird droppings. Birds naturally roost in trees and whilst their droppings may be perceived to be a nuisance, this is not considered sufficient reason to prune or remove a tree. The Council will not remove any bird droppings from private land.
- A tree will not be removed or pruned to alleviate the sap or honeydew falling from trees onto objects or surfaces beneath. Honeydew is the sticky excretion produced by aphids feeding on the sugary sap found within the tree's leaves. This is a natural and seasonal event. Some tree species like limes and sycamores are more prone to aphid infestation than others. When new trees are being planted species selection takes this into account, with trees less prone to aphids being chosen where possible. .
- The tree drops leaves in the autumn. Autumn leaf fall is a natural event. The public footways and highways are cleared of autumn leaf fall by the Council cleansing department. The clearance of autumn leaves from private gardens, driveways and gutters etc. is regarded as being part of normal property maintenance and is the property owner's or tenant's responsibility. Even if the leaves originated from Council owned trees.
- The tree drops fruit. The Council will not fell a tree to prevent fruit from falling on to surfaces below.

Crown reductions before and after

Why are trees removed?

The council inspect highway and parks trees on a cyclical basis as part of their overall tree management programme.

Given the diversity of age range and urban land use it is inevitable trees may on occasion require removal. The decision to remove a tree will be taken by one of the council's qualified Arboricultural staff, based on sound arboricultural practice and appropriateness to the situation. In an urban environment trees cannot be left to die or become destabilised without intervention. The level of intervention has to be in proportion to the likelihood of death, injury or damage that would result from tree failure.

It should also be considered that just because a tree is alive and in full leaf this does not mean that it is not a hazard. It may have structural, internal or underground rooting problems which are severe enough to render the tree hazardous and would require removal. These hazards may not always be apparent to the untrained eye.

Trees will be removed for a number of reasons;

- The tree is dead.
- The tree has become structurally unsound due to colonisation by wood decaying fungi. Or the tree is colonised by wood decaying fungi and also has poor vitality and therefore unlikely to recover so retention is not viable.
- The tree is colonised with Meripilus giganteus (or similar decaying organism) where it is not practicable to quantify the extent of decay and the tree is growing close to people and property.
- The tree is infected with a disease from which it is unlikely to recover or infected with a pest or disease and removal is required for bio security reasons. This helps to prevent the spread of the pest or disease affecting other healthy trees.
- The tree is in poor physiological condition and unlikely to recover, due to drought or other reasons.
- The tree has poor structural form such as multiple bark inclusions or is a species prone to branch failure.
- The tree is an unsuitable species for its location and is being removed as part of a phased removal, or total removal and replanting programme. This could apply to a group of trees or a single tree.
- Where a tree is in competition with another or other trees and thinning is necessary to promote healthy growth of others.
- The tree is self-sown in an unfavourable location.
- The tree has suffered mechanical damage and has been rendered unviable for retention due to catastrophic damage to crown, stem or root system. This can be a result of actions such as traffic collisions or severe storm damage.
- The tree has caused significant root damage to a footway or other highway structure where alternative engineering solutions are not viable and root pruning is not viable due to the effect on tree stability, health or where the species is known to produce significant sucker growth.



- The tree has grown in a way as to obstruct the highway to impede its safe use. This refers to stems, root stocks or buttresses
- The tree has been proven to be the cause of direct or indirect damage to property and other solutions rather than tree removal are not practicable.
- The tree requires removal to allow statutory undertakers to repair apparatus.
- To implement an approved planning permission. Full planning permissions, where standing trees would impede the approved development, do not need to directly specify the trees to be felled in their application. However, where there's a desire to remove standing trees, and those trees are not, for example, within the approved footprint of a structure to be constructed, then those trees would need to be explicitly referenced in the planning application and permission in order to allow for their legal felling. This includes trees subject to Tree Preservation Orders.

Informing residents of tree removals?

Residents will be advised when a tree in a street is going to be removed by:-

- Hand-delivered letters to houses in the street in a 30 metre radius form the tree (not flats where more than four residences are in the same building)
- A notice will be placed on the tree at least 10 working days before it is to be removed
- Information will be posted on the council website
- Ward councillors will be informed by e-mail

When a tree has to be removed in an emergency it will not be possible to issue letters or notices and residents will not be informed.



Trees and Subsidence

From time to time trees may be subject to complaint and claim for compensation on the basis of the allegation that a tree is causing damage to property. Trees are regularly and incorrectly blamed as the 'obvious' cause of damage.

Damage is categorised as either direct or indirect damage. Direct damage may occur from a falling tree or branch or where a tree is in direct physical contact with a neighbouring structure. Indirect damage may result from the actions of tree roots removing moisture from the soil on neighbouring properties resulting in subsidence.

Subsidence generally occurs in areas with an underlying geology of shrinkable clay. Such soils are prone to expand when wet and shrink when drying out. The resulting changes in volume can affect structures built upon them. Periods of drought or sustained wet weather are influential on this pattern. Tree roots are almost invariably chosen as the primary factor however damage may result from a number of factors, such as ; inadequate foundations, structural failure, poor maintenance, vibrations from roads or railways, major work in neighbouring properties or leaking drains.
Tree roots typically will not cause any problems to drains in good condition, unless they are located very close to a tree where some larger roots may come into contact with the drains as they increase in girth.

When tree roots are found within drains the cause is usually a broken or leaking pipe which has attracted tree roots by increasing the moisture content of the soils surrounding the leaking section. Roots can then gain access through the broken pipe and may grow prolifically. Southend-on-Sea Borough Council will not prune, cut the roots, or fell a tree owned or managed by the Council to prevent root growth in the vicinity of drain networks.

Where it is alleged that council-owned trees are implicated in building damage, the council will require the property owner to provide technical evidence to support their claim. This evidence may include but not necessarily limited to:-

- Engineer's report detailing the damage to the building
- Details of surrounding trees/vegetation
- Details of any findings from trial pit excavations
- Evidence of level or crack monitoring
- Root identification
- Drain survey
- Soil analysis

Claims against the Council are managed by the Risk and Insurance team supported by site surveys carried out by the Arboricultural team. Where it is considered that a tree has been justifiably implicated in causing damage there are several potential courses of action. These include:

- Crown reduction to reduce water uptake by the tree
- Excavate a trench and sever roots where this does not compromise the stability of the tree
- Remove the tree
- The course of action selected will depend upon the extent of damage and the details provided by the evidence



Trees in Green Spaces

Southend-on-Sea Borough Council has a rich heritage of tree planting within its parks and open spaces and therefore has many fine trees within them.

Parks and open spaces offer greater opportunity to plant large growing species and allow them to grow to their full mature size. They are generally not subject to the same pressure for pruning compared to street trees since they do not ususally affect street furniture, highways or buildings and houses.

It is therefore the Council's aim to allow trees within parks to grow to their mature size although it is accepted on occasion that conflicts will arise and pruning may be necessary.

It is possible to plant cohesive groups of trees and native hedgerows where connection between canopies is made. Trees provide habitats for bats, birds, insects, lichens and mammals, especially in older trees which may contain cavities, holes and dead wood. It is therefore desirable to retain these features in trees where possible as long as the tree does not pose an unacceptable risk of harm to people or properties. To retain features such as this pruning may often be necessary to lessen the weight on a defective part of the tree.

Trees will continue to be planted in parks but care will be taken not to plant trees to the detriment of other habitats such as grassland or meadows.

Woodlands

The council currently maintains 41.00 hectares of woodland. Woodland makes an important contribution to the overall canopy cover of the town. There are three areas of woodland; Belfairs Nature Reserve and Park, Oakwood North and South and St Mary's Nature Reserve.

Belfairs Park is by far the most significant woodland covering 36.8 hectares. It is listed as a Site of Special Scientific Interest (SSSI) as Hadleigh Great Wood and Dodd's Grove. The wood is part of the ancient Hadleigh Great Wood. The woodland is managed as coppice-with-standards oak woodland. It is recognised as one of the largest and best examples of ancient woodland in South Essex and the last known stronghold of the rare Heath Fritillary butterfly. Oak trees dominate as standards while coppice species include Hornbeam, Sweet Chestnut, Birch and Hazel. Some of the coppice stools are estimated to be 1,000 years old. The wood is a richly diverse habitat with many species of flora and fauna.

Oakwood North and South are ancient semi- natural woodlands of lapsed hornbeam coppice and oak standards. They are not currently under active management.

St. Marys Nature Reserve is secondary woodland.

Trees on the Highway

Tree roots can sometimes cause damage to the footways and the highway. The stems of trees may sometimes grow to a size that restricts the width of the footway.

The council has a duty under Section 41 of the Highways Act 1981 to ensure that pathways are reasonably passable without presenting a danger. It must also ensure that access is equal for all under the Equality Act 2010. This will mean that on some occasions it is necessary to remove a tree. However, this will be the last option after all other alternatives have been considered. The council will follow best practise and consider the engineering alternatives to the removal of trees.

Increased tree pit size, infilled with self-binding gravel

These will be considered on a case by case basis and include:

- Increase the size of the tree pit where footway width allows
- Use flexible infill materials such as resin bound or self-binding gravel where pavement width is restricted
- Replace wide kerb stones with narrow ones, construct concrete kerb 'in situ' or dispense with kerbstone
- Use tarmac surfacing to replace paving stones
- Prune the roots where this will not destabilise the tree
- Construct build-outs to accommodate existing trees or plant new ones

Trees on Housing Land

There are approximately 1500 trees growing on housing land managed on behalf of the council by South Essex Homes. These trees offer all of the benefits described in this policy and contribute to the overall canopy cover of the town. It is important that their maintenance is consistent with the management policy of Southend-on-Sea Borough Council.

Trees in Private Ownership

Privately owned trees
In the vast majority of cases Southend-on-Sea Borough Council has no control over privately owned trees, either regarding their maintenance or with regard to planting of trees on private land. Legislation exists to enable the Council to protect trees or woodlands on private land by serving Tree Preservation Orders, or they can be afforded legal protection to an extent if they are growing within a Conservation Area.

Under the terms of The Highways Act 1981 Council may serve notice on the owner of a private tree if the tree presents a risk to the safe use of the highway. This can include removing dangerous trees, pruning branches to clear sightlines, road signs or traffic lights or to remove branches restricting safe use of the footway. If the work is not carried out then this can be carried out by the council with all reasonable costs recharged to the owner of the tree.

On occasions owners may not make dangerous trees safe. In exceptional circumstances the council has powers under the Local Government (Miscellaneous Provisions) Act 1976 to undertake work on private land when a tree presents an immediate danger to people or property.

Trees and Planning

Tree Preservation Orders

Legislation exists to enable the Council to legally protect trees. This is by the way of a Tree Preservation Order (T.P.O.) or if they are growing within a Conservation Area.In either case The grant of planning permission overrides a TPO he trees have to be over 3.5m in height to be considered for protection.

If a tree is protected by a TPO a written application is necessary to the Council to gain consent for works to it. Applications will be assessed on the reasons for the work and the impact it may have on the tree either to its visual amenity or its health.

If a tree is growing within a Conservation Area six weeks written notice is required to be given to the Council of proposed works. This gives the Council an opportunity to assess the notification and serve a TPO if the works are detrimental to visual amenity or tree health.

The law on Tree Preservation Orders is in Part VIII of the Town and Country Planning Act 1990 as amended and in the Town and Country Planning (Tree Preservation) (England) Regulations 2012. The grant of planning permission overrides a TPO. At present there are 189 Tree Preservation Orders within the Borough. These individual orders may protect a single tree or multiple trees. Further information on TPOs and Conservation Areas can be found on the councils website at https://www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas

Trees are assessed on their suitability for a TPO using the TEMPO system (Tree evaluation method for preservation orders) developed by Forbes Laird Arboricultural Consultancy. http://www.flac.uk.com/wp-content/uploads/2014/12/TEMPO-GN.pdf

Trees on development sites

The Town and Country Planning Act 1990 places a statutory duty on Local Authorities "to ensure whenever it is appropriate that in granting planning permission for any development, adequate provision is made by the imposition of conditions for the preservation or planting of trees".

The Council will not register applications for development unless full tree related information is supplied in line with BS5837:2012.

Further information can be found on the council website. https://www.southend.gov.uk/downloads/file/5405/local_validation_list_document_-_march_2018_adopted

Assessing the value of trees removed for development and replacement planting

The Council will be opposed to the removal of A and B category trees on development sites and construction within their root protection areas will be resisted. A and B category trees are

> A – Trees of high quality and value, in such a condition as to be able to make a substantial contribution (minimum 40+ years remaining lifespan suggested).
> B – Trees of moderate quality and value, in such a condition as to be able to make a substantial contribution (minimum 20+ years remaining lifespan suggested).

If trees are proposed to be felled as part of a planning application, replacement planting will be sought. All trees proposed for planting should be accompanied by a full specification for watering and maintenance for a period of 3 growing seasons after planting. Trees proposed for planting on development sites should be procured and established as detailed in BS8545:2014. This is the Brirish Standard which details recommendations to assist people involved in planning, designing, producing, planting and managing new trees in the landscape.

As the general rule the council will not agree to the removal of street trees as part of private development schemes or for the provision of private vehicle crossings.. In some exceptional circumstances tree removal may prove unavoidable. Under these conditions the council will assess the monetary value of the tree using the system Capital Asset Value for Amenity Trees (CAVAT). This valuation will form the basis of the compensation for the loss and used to fund replacement tree planting.

Rural hedgerows

Hedgerows in some cases may be afforded legal protection under The Hedgerows Regulations 1997 if they meet certain criteria. Details can be found at http://www.legislation.gov.uk/uksi/1997/1160/contents/made. The aim of the legislation is to control the removal of rural hedgerows.

High Hedges

There is no set legal limit to how high a tree or hedge can grow. Neighbour disputes can sometimes occur when a high hedge causes shading and other problems. The council can intervene but this is on a case by case basis with a fee being payable. Full details of the legislation and advisory leaflets are available at.https://www.gov.uk/government/collections/high-hedges

The legislation does not apply to single trees and complaints are only considered if there are two or more trees growing in a line which are evergreen or semi-evergreen and more than two metres high.

Community Involvement

Residents, business as well as charity and community groups have a key role to play in increasing canopy cover across the borough, particularly in the areas which the council has little opportunity to plant. By these groups and individuals planting trees in their gardens or land they own they can help make a difference. To support groups and individuals the council will provide information and encourage residents to learn more about trees and provide opportunities for people to join in with tree planting projects in the parks and open spaces.

The current tree scheme will be extended to include fruit trees and packs of tree whips to be planted in community tree planting projects. The scheme will also be promoted as a way of gifting trees to celebrate special occasions, birthdays and other celebrations. The network of community orchards will be extended.

Community tree planting days provide opportunities for people to take part in tree planting initiatives in green spaces. Planting schemes can have multiple aims;

- To extend the canopy cover
- To create valuable new habitat
- To create and care for a network of new orchards
- To bring the community together

Tree Planting Strategy

Tree Planting

Southend-on-Sea Borough Council has a rich heritage of tree planting in its parks and streets. Records indicate the first plantings were carried out in 1901 when the then Corporation decided to 're-afforest the borough of Southend'.

The council has continued planting over the following years to ensure tree cover is maintained and increased. This has left us with a diverse range of ages and species.. Trees planted on council sites will be sourced and established in accordance with B.S.8545 Trees: from nursery to independence in the landscape-Recommendations.

At present the council carries out planting in parks and within the highway. However, previous planting has not been based on targeting areas of the borough with a lighter canopy cover.

Future tree planting will be based on maintaining and increasing canopy cover to achieve an average of 15 percent coverage by 2050. The council will seek to identify available sites to create new areas of woodland or extend existing woodland. This may be achieved by planting or allowing areas to regenerate naturally.

Tree planting will generally be avoided on Scheduled Ancient Monuments (SAM) to protect and enhance the historic environment. These sites are the Danish Camp, Prittlewell Camp, Southchurch Hall Gardens and parts of Priory Park.

Donated Tree Scheme

The council offers a subsidised donated tree scheme and details can be found on the council website Under the scheme a tree can be purchased by a donation to the council and for planting in parks, open spaces and in suitable locations on the highway. Currently only standard trees can be donated. It is planned to develop the scheme to offer options to donate fruit trees, packs of tree whips and younger trees to be used in community tree planting projects.

Street tree planting

Many requests are received from residents for tree planting especially if trees are removed. These are noted and trees planted where appropriate. The Arboricultural Officers will also make note of streets with low tree stock or trees which require replacement during routine inspections.

Rather than adopting an ad-hoc approach to replacing individual trees a more strategic view will be taken when planting is considered within streets. where possible. This is due to operational efficiency with regard to planting and aftercare, particularly to watering. Where trees are removed it is often very difficult to plant again in exactly the same location due to stump remnants or roots, the presence of utilities or soil pathogens.

Planting in new hard surfaces

Within new highway schemes or other hard landscaping projects, special planting techniques which allow adequate soil volume to be available and avoid tree roots damaging the hard surface will be used. http://www.tdag.org.uk/trees-in-hard-landscapes.html.

Species selection

Tree species will be selected in line with the 'right tree, right place' approach. This considers the overall size and form of the tree. It considers its proximity to buildings, roads, street furniture, the historic environment, land typology as well as the prevailing use of the site.

Both native and non-native species will be used for planting, with a species best suited for the location being chosen. A diverse range of species will help establish a tree population resilient to climate change and the threat of pests and diseases.

The overall size and form of the tree will be considered along with its proximity to buildings, roads, street furniture as well as the prevailing site conditions.

Where woodland or natural habitat is to be created native species will be used.

Limitations to planting

There are occasions when planting is not possible this may be due to:

- Insufficient above ground growing room
- Above and below ground utilities
- Sight lines being obscured
- Insufficient width of footway
- Poor site conditions which cannot be reasonably improved
- Covering desirable architecture
- Street furniture
- Obscuration of road signage and traffic signals
- Proximity of private vehicle crossings
- Where tree planting will be detrimental to the existing habitat (grassland habitats etc.)
- Lack of funding

Canopy Cover Assessment

It should be noted that within the canopy cover report there are many areas Southend-on-Sea Borough Council do not own which have low tree cover. Some of these cover substantial areas of land. Existing land use can also influence the availability of land for planting which Southend-on-Sea Borough Council do own, for example, the airport and its flight approaches.

The canopy cover report commissioned in October 2019 will be used to inform future planting. Initially planting undertaken until 2023 will be focused on wards with the lowest cover where it is practically viable to plant new trees with planting above that which is normally carried out. After 2023 tree planting will continue to be programmed based on the overall canopy cover of the borough.

The council is committed to maintaining and enhancing tree canopy cover in the borough and it is our aim to increase the canopy cover to a borough average of at least 15% by 2050.

Annual Progress Review

Total number of trees removed in the year	
Total number of trees planted	
Total number of whips planted in the year	
Involvement in community events by volunteer hours	
Number of trees donated in the year	

Appendix 1

Acer	Maple
Betula	Birch
Aesculus	Horse chestnut
Alnus	Alder
Ailanthus	Tree of Heaven
Carpinus	Hornbeam
Celtis	Hackberry
Crataegus	Hawthorn
Chamaecyparis	False Cypress
Fagus	Beech
Gingko	Gingko
Gleditsia	Honey locust
Ilex	Holly
Koelreuteria	Pride of India
Liquidambar	Sweet Gum Tree
Malus	Apple
Pinus	Pine
Platanus	Plane
Populus	Poplar
Prunus	Cherry
Pyrus	Pear
Quercus	Oak
Robinia	Locust
Salix	Willow
Sorbus	includes Mountain Ash, Whitebeam, Rowan
Tilia	Lime
Ulmus	Elm

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