The bark **B** of an elm tree is corky, dark grey and deeply furrowed.

Elms have small flowers, which appear before the leaves and give the tree a purple colour in February and March. The flowers have male and female parts, and the fertilised seeds develop into bunches of parchment-like oval wings with the seed on the middle **C**. In the UK, elm seeds are rarely viable.





Elm trees usually reproduce by suckering from the roots, thus producing genetically identical trees (a fine example of this is in Abney Park Cemetery). It is thought that this lack of genetic variation is the main reason for the catastrophic decline in English Elms due to Dutch Elm Disease (see below).

DUTCH ELM DISEASE

This is a microscopic fungus, *Ophiostoma novo-ulmi*, which blocks the transport vessels of the tree by interfering with its hormones. The fungus fruits under the bark of infected trees, where two species of Scolytus bark beetle breed. The beetles spread the spores, each one carrying up to half-a-million spores. The disease is also dispersed through the root systems of elm trees that produce suckers.

Dutch Elm Disease in Britain has caused the loss of more than 25 million elms since the 1960s – especially English Elms. The devastating outbreak in 1971 came from imported elm timber which had not been stripped of its bark.

ELM SURVEY

The Natural History Museum is collecting data on the few thousand elms which still survive. They hope to understand more about Dutch Elm Disease and why some trees are more resistant than others.

Visit www.nhm.ac.uk/science/biodiversity and www.ramblers.org.uk/elms for further information.

ELM TREES IN HACKNEY



A fine Huntingdon Elm, in seed, on Hackney Downs. This hybrid of Wych Elm and Smooth-leaved Elm is more resistant to Dutch Elm Disease than English Elm.

PUBLIC TRANSPORT

Buses: All areas are near to bus routes. See: www.tfl.gov.uk/buses; or phone 020 7222 1234

Trains: Some nearby stations are marked ≥

This leaflet was prepared by Anne Woollett and Mike Trier with assistance from Prue Poulton, Ian Graham, Annie Chipchase, Russell Miller and Eugene Clerkin.

For copies of the leaflet contact 020 8985 1256, or see

www.hackneyenvironment.org.uk

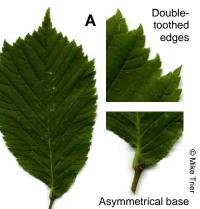
Elms are arguably some of Britain's oldest trees. From pollen records in fossils, they are known to have been widespread across Britain in Neolithic forests. English Elms are some of the UK's oldest *living* trees. They are thought to have been brought here by Bronze Age farmers around 5000 years ago from their native South East Europe.

USES OF ELM WOOD

Elm timber is very durable in wet conditions. It has been used for hundreds of years to make waterpipes, wharfs, ships, weather-boarding, hubs of cartwheels, wheelbarrows, floorboards and coffins. The irregular and intricate grain patterns of the wood make it popular for furniture and sculpture.

IDENTIFYING ELM TREES

Elm leaves **A** are arranged alternately on the twigs. The edges are double-toothed; that is, the main teeth themselves have toothed edges. The base of the leaf is lower on one side of the stalk than on the other ('asymmetrical').



The leaves of the three native species of elm vary in size, shape, colour and hairiness:

Wych Elm Ulmus glabra

10–18cm long; very rough hairs on upper surface (rub from tip to base); leaf stalk shorter than 3mm.

Smooth-leaved (or Dutch) Elm *Ulmus minor* Less than 7cm long and usually longer than wide; glossy bright green and smooth on upper surface; variable shape.

English (or Common) Elm *Ulmus procera* Less than 7cm long, broadly oval to circular; hairy stalk when mature.

LOCATIONS OF MATURE ELM TREES IN HACKNEY

KEY

X Surviving elm trees

boundary

ABNEY PARK CEMETERY

CLISSOLD PARK

SHOREDITCH

Hackney Borough

COMMO

NEWINGTON

COMMON

PARK

→ HACKNEY

LONDON

FIFI DS

Regents Canal

HAGGERSTON

DOWNS

POND

ST. JOHN'S

WELL STREET

CHURCHYARD, 3

LAURISTON RD

CHURCHYARD

HACKNEY

MARSHES

VICTORIA

PARK

HOLMLEIGH CUTTING

There are over 30 mature elm trees in Hackney, but we are still losing them to Dutch Elm Disease. The map shows their approximate locations, and the list (opposite) gives further details.



Most of Hackney's mature elms are Huntingdon Elm
– a hybrid of Wych Elm with Smooth-leaved Elm.
They were planted when the Lammas Lands came

into public ownership in the 1880s-1890s.

easily distinguishes them from the London Planes - the

other trees in this avenue.

This hybrid is less susceptible to Dutch Elm Disease than English Elm, but some die each year and have to be cut down. North Millfields lost two in 2003; the remaining elm on Stoke Newington Common became infected, and was felled in 2005.

More recent plantings have been Smooth-leaved Elm.
It does not grow as tall as Huntingdon Elm and the leaves are smaller.
In Abney Park and on Millfields and Hackney Marshes.

In Abney Park and on Millfields and Hackney Marshes, elms have regenerated themselves from their roots; but, once they grow to about 6m (20ft), the disease takes hold and they die. There are some new plantings of elm trees in many of Hackney's parks which are considered to be more resistant to disease.

NORTH HACKNEY Abney Park Cemetery

Some regenerated English Elms along and near Great Elm Walk in Abney Park Cemetery.

Springfield Park

Huntingdon Elm at northern edge of Springfield Park by Spring Hill. Another lower down.

EAST HACKNEY Hackney Downs

Two large Huntingdon Elms along Hackney Downs Road and two smaller Smooth-leaved Elms along Downs Park Road.

Clapton Pond

Smooth-leaved Elm at Clapton Pond.

Millfields

Huntingdon Elms grow in the avenue of tall plane and elm trees in North Millfields (10) and South Millfields (14).

Also alongside Fletching Road (the largest in the Borough, with a girth of 333cm/12ft) and Lea Bridge, Wattisfield and Chatsworth Roads.

Hackney Marshes

Newly planted elms by south car park on Hackney Marshes, by Homerton Road.

Wick Wood

Two Smooth-leaved Elms by row of planes in Wick Wood.

SOUTH HACKNEY Churchyard, Lauriston Road

Large Huntingdon Elm in St. John of Jerusalem churchyard near junction with Balcorne Street. Huntingdon Elm in back garden of house in **Penshurst Road**, visible from Banbury Road.

If you know of any elms trees in Hackney to add to this list, please contact Hackney's Tree Officer: ian.graham@hackney.gov.uk