

## **As above, so below it must be with trees**

*Wednesday, September 28, 2022*

Hong Kong has continued to see freak incidents, the latest of which saw a tree fall in Ho Man Tin. A royal poinciana, or flamboyant, tree fell and smashed four vehicles. Fortunately, there was no fatal damage. I am going to say something controversial.

I believe this is due to an ineffective focus on the issues of safety of trees on sidewalks.

As we develop our city, we need to build more roads, and invariably some of them encroach on to areas where we have large trees we'd like to preserve.

Unfortunately, buildings and sidewalks limit the growth area of tree roots to small areas.

For a tree to survive and be stable structurally, it needs as much space below ground as above.

What I mean is if you see the crown of a tree, you can expect the growth area of its roots to mirror its crown.

The constraints described above often prevent roots from growing to a shape and depth to provide the necessary stability to the tree.

Even more unfortunate is that some of the experts we appoint to look after the wellbeing of trees are mainly biologists who focus on their biological health and put less emphasis on their physical or structural stability.

They often inspect a tree to ensure it has adequate underground water intake, and not been attacked by viruses or termites.

These are important issues for a tree's health, but they are not a complete check.

With its roots limited in its spread, a tree's structure may be unstable, and when branches and leaves keep growing, the degree of its stability decreases.

For these trees, with their roots constrained, to stand up without falling, they need to be trimmed regularly, so that the crown is about the same size and span as the roots.

This is even more important during wet and typhoon seasons when leaves and branches are heavy with rainwater and trunks are weakened by having to support the extra weight, and inevitably, a part of the tree or the whole thing falls.

There was a lot of controversy when old trees along Bonham Road were cut down by the Highways Department.

Complaints continued for years, but personally I feel our government has done a good job of making our roads safe, especially for pedestrians.

We must also recognize why "hundred- year-old trees" are so precious.

It is because trees do not normally last that long in urban areas due to all sorts of reasons, mainly to do with constraints to root growth and proper irrigation, or decay from virus or termite attacks.

Like antiques, those that survive a century require very careful care and attention, with continuous maintenance, to preserve their longevity.

There are a few successful examples of replanting on new sites and in situ preservation, but these are invariably expensive solutions and only trees of special value should be preserved.

As our population grows and people need more land for buildings and infrastructure, some trees unfortunately need to be removed.

It is a matter of our priorities where land use is concerned, and I believe Hong Kong has done a fine job of preserving those that are worth keeping.

We must give human life and safety in urban areas the highest priority and preserving trees simply for the sake of keeping them may not be in our best interests.

Everyone should also help to observe and report unstable structure of trees. It is our civic duty to help ourselves and the general public to ensure a high level of safety.

*Veteran engineer Edmund Leung Kwong-ho casts an expert eye over features of modern life*