

No Place for Old Trees—PART I

By Cass Turnbull

Seattle and Its Trees

For many residents and visitors, Seattle is a city of trees. Trees are, after all, why Seattle was founded—the loggers came because we grew some of the biggest trees in the world right here in temperate lowlands of the Pacific Northwest. Our big trees are why we are known as the Emerald City. The tree is the international symbol of sustainability and the green movement—two things to which Seattleites aspire.

“If you want to see some really big, scary trees, go to Washington State.” —David Letterman

But for all the back-pack vibe, Seattle is not as friendly to trees as might be expected. History bears this out. For example, in the 1920s Ravenna Park was home to a grove of magnificent large conifers named after important people of the times—Jan Paderewski (the famed Polish pianist), President Theodore Roosevelt, and General Robert E. Lee are but three of them. One Douglas fir was reportedly 375 feet tall (taller than the statue of liberty—including the pedestal); another was 14 feet in diameter. They were so impressive that world dignitaries would visit to have their pictures taken with them. In a span of ten years, all were cut down, most by our own Parks Department, which had them declared, one by one, dangerous or dead. Others simply disappeared amidst suspicions that the Parks Department supervisor sold them.

Today, we are not doing much better. Tree protection laws are absent, ineffective, or unenforced (or in some cases absurdly over-enforced). We chronically underfund the city’s maintenance crews for both the urban forest and Seattle’s green spaces. Seattle is awash in money from the building boom, but green spaces are budgeted as though we were still in the Great Recession. Perhaps this is partly the result of the larger directional shift in government caused by the taxpayer revolt. The government no longer takes care of the public good with our tax dollars; instead it is administered through user fees, by privatizing, and by shifting responsibility back to the public—its volunteers and property owners. Apparently, this is preferable to, say, taxing the beneficiaries of the building boom.

Seattleites have been remarkably blasé about tree losses throughout the decades. Opinions vary on the reasons for this attitude: the desire for more light in a grey climate, close access to the woods, the ease of growing trees, fear of large trees exacerbated by media hype after storms, or the fact that Washington is a property-rights state, even those left-leaning folks located in the urban west. The attitude seems to be, “Oh, it was horrible to see that tree cut down” followed by, “But people have the right to do what they want with their own property.” These days, we hear “We need that land for low income housing” and always, “Don’t worry, trees grow back.”

I’ve been wondering just how green we are here in Seattle and, more importantly, how are we green?

No Place for Old Trees

Often, I use the terms *open space*, *green space*, *permeable land*, and *the urban forest* interchangeably. Though they are not exactly the same, they are closely related. I think of open space as trees waiting to happen. In fact, left alone long enough, trees do just happen—cute little Doug fir seedlings, big-leaf maples, and western red cedars just spring up. The twin human predispositions—kindness toward baby anythings and procrastination—work in favor of native tree re-establishment. Our city’s skyline is dominated by these self-seeded trees, not all of them in the greenbelts. Just look down when you fly into Seattle and take note of the hundreds of giant green cones dotting the neighborhoods. Seattle’s urban forest has withstood several bouts of clear cutting, at first for lumber and industry and then for development. The forest has always grown back, though, admittedly, with fewer and smaller trees every time.

Now, though, I question whether trees will grow back after the current building boom in numbers high enough to do the environmental work we so desperately need.

Gonifers

Trees and open space are great at mitigating the negative effects of urbanization.

Stormwater runoff is the number one cause of marine pollution in our area, not industry. Our big evergreen conifer trees can do the heavy lifting for ecology by catching, cleaning, cooling, and slowly releasing downpours of rain because they are, well, big and evergreen and can work in the winter which is when it rains the most around here and the deciduous trees are bare.*

In the summer our big trees are large enough to bring the ambient temperature of concrete on a hot day down as much as 20 degrees over a very large area. Cities, as you probably already know, are subject to the Urban Heat Island Effect. The increased heat of the city is due to all that concrete and other reflective surfaces that magnify heat and store it to be released at night, when you are trying to sleep, which I’m sure I don’t need to tell you. Nationally, urban areas are heating up twice as fast as nearby rural areas. Air-conditioning sales are rising sharply in Seattle, but air conditioners use expensive energy and, as they cool the indoors, they force heat to the outdoors making things worse for everything and everybody outside. Trees are the poor man’s air-conditioning. They also cool the entire city, not just parked cars.

“We’d need trees if they were ugly and smelled bad.” — Don Wilkie

Unfortunately, these big trees, especially big conifers, are the first to go and they are rarely replanted when redevelopment happens. The oft-repeated theory is that our city lots are too small for big trees. I challenge that assertion.

Take a look at any hillside in Seattle and imagine it without those great green cones or the big deciduous trees. Erase them in your mind's eye. Then tell me what city you are looking at—it's not nice, and it is certainly not Seattle. The problem is not the size of the lot, the problem is the size of the buildings.

Density and the MacMansion

Yes, a certain amount of room is required to support any tree, big or small. According to *Urban Tree Canopy Analysis Project Report, 2009*, a medium-sized tree requires 900 square feet to live. It is the room for trees that is in jeopardy. Private open space is diminishing rapidly due to the rush to accommodate density. Seattle is not accommodating density so much as it is accommodating the wealthy people who want to move here. The decreasing open space is supported by the profit motive. Instead of fixing up older, smaller, less expensive houses, builders tear them down, enlarge the building footprint, and build and sell a bigger home for more money. Why would they do anything else? Houses, whose average size was 938 square feet in 1950, are now being replaced with homes that average 2,480 square feet!

Building code changes have taken their toll, too. Those changes were pushed through around 2010 by the local builders' association and, sadly, also by good, ecologically minded people

who are counting on urban density to save the countryside from development. Density was supposed to lower the cost of housing by increasing the supply. But the changes seem to be having the opposite effect, with all the redevelopment destroying low-income housing, driving up housing prices, and causing middle-income people to move to distant places (where they displace farms and forests) and commute to the big city to work.

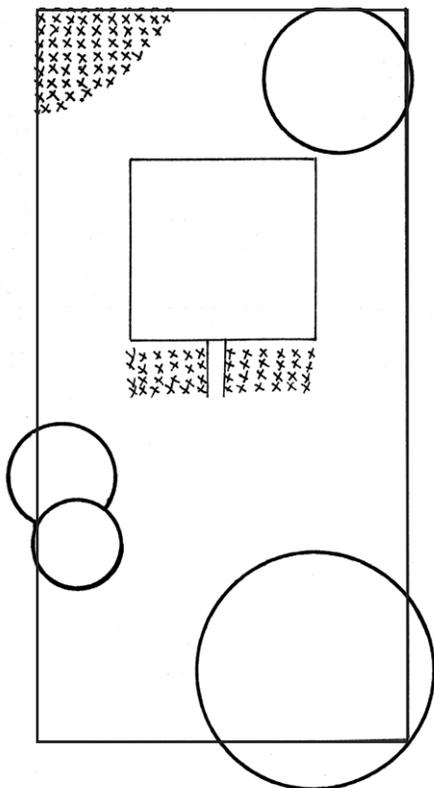
In theory, theory and practice are the same. In practice, they are not.

Open Space

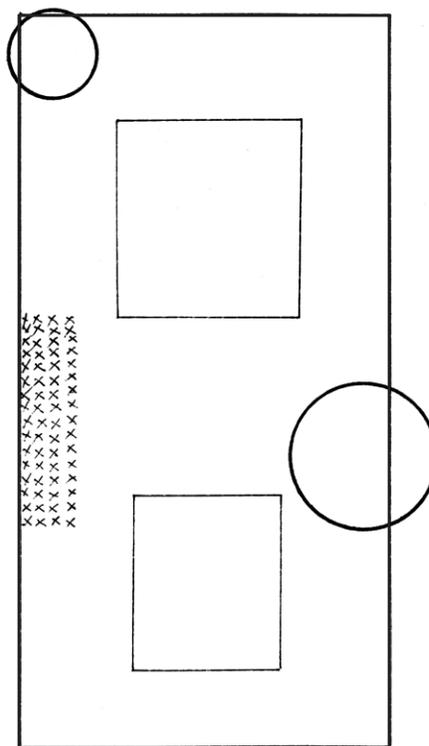
Urban open space determines the total number of trees that can exist in the city. That's because open space equals planting space. You can't plant a tree in the middle of the building. Well, actually, you can, and people try, as you will read in Part Two, next issue. But such planting is costly and difficult—besides, the trees don't like it.

Total open space is divided into *private open space* (back yards, school grounds, and landscaping at businesses, which make up 54% of Seattle's total open space) and *public open space* (mostly parks and parking strips, which make up 46% of the city's total public open space).

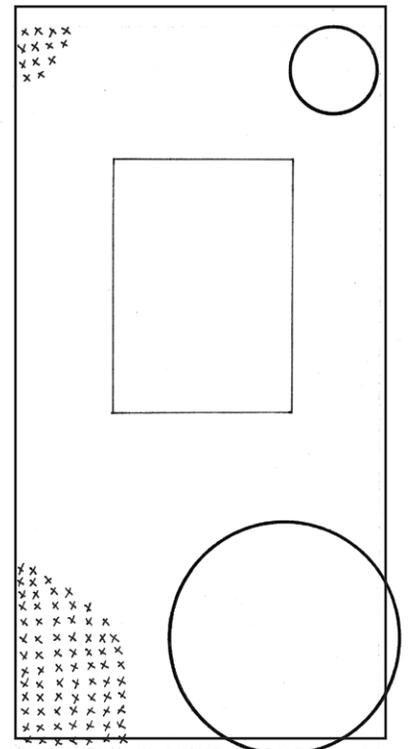
Things are changing fast. The amount of *public open space* (parks) is increasing very slowly (because of the cost of land and lack of funding), while the number of people using this space is skyrocketing. Not only are more people headed our way, many of them will be housed in new Soviet-block-style condominiums



SMALL LOT + SMALL HOUSE + SHRUBS. ONE TREE IS LARGE.



SMALL LOT + SMALL HOUSE + MOTHER-IN-LAW + 2 TREES + VEGIE GARDEN. NEITHER TREE IS LARGE.



SMALL LOT + MACMANSION + 2 TREES + SHRUBS. ONE TREE IS LARGE.

and apartments and in townhouses with little or no *private open space* to use. These people will be going to parks to do things they used to do in their own back yards—play or relax with their friends, kid or dog. Since they probably won't have cars and therefore cannot drive to Mt Si for a day hike, they will also increasingly use existing public greenspace for hiking and other outdoor recreation. This is a double whammy: more people, less *private open space*. They both will put increasing pressure on existing parks. Nobody seems to be taking this into account in the planning documents; in fact, the opposite is the case.

SEATTLE IS PLANNING TO
REDUCE THE AMOUNT OF
PUBLIC OPEN SPACE
WE REQUIRE AND ACQUIRE!

The Draft Environmental Impact Statement for the Seattle for the Comprehensive Plan Update, 2015, states: “to serve projected 20-year growth that meets the goal of one acre per 100 residents,** the city would need to add 1,400 acres of open space to the current park inventory of 6,200 acres.” That’s 70 acres per year. Between 2000 and 2014 Seattle has added an average of 18 acres per year. By way of comparison, Volunteer Park is 48 acres.

The Seattle Urban Tree Canopy Analysis Project Report says we will need 410 acres of new tree cover every year to make our Urban Forest coverage goal of 40%. Our current canopy cover is listed as anywhere between 23% and 29%. ***

Proposed Changes to Seattle’s Comprehensive Plan

So, is an ecological Armageddon headed our way? Some say it is already here. How has the city responded? By tying public open space funding to development? By changing the building codes to preserve more private open space? By creating a tree fund like Portland’s. *Heck, no!* Seattle’s response is—you guessed it—to change the goals.

The Seattle Budget Department and Parks Superintendent have declared that the “per capita goals, like the ‘breathing

***Big Trees Work Harder**

A TREE WITH A 30” TRUNK DIAMETER WILL DELIVER 70% MORE ENVIRONMENTAL SERVICES THAN A 3” SAPLING. —AMERICAN FORESTRY ASSOCIATION

69% OF SEATTLE’S TREES ARE UNDER 12” IN TRUNK DIAMETER. —SEATTLE URBAN FORESTRY PLAN

****Acres of Parkland per 100 residents—Trust for Public Land, 2015**

HONOLULU	3.45
PORTLAND	2.37
DC	1.32
ATLANTA	1.15
SEATTLE	1.00
BOSTON	.76
JERSEY CITY	.65
NEW YORK	.46

***** Percentage Tree Canopy Cover by City – New York Parks 2010/ Jersey City Canopy Report**

PITTSBURGH	42%
AUSTIN	40%
DC	35%
HOUSTON	30%
ATLANTA	27%
SYRACUSE	26%
SEATTLE	25%
BOSTON	22%
LA	18%
JERSEY CITY	11%

room’ goal (one acre of open space per 100 residents) are not attainable.” The new Comprehensive Plan proposal is ambiguous about its relationship the Parks Plan metrics. It seems to be laying the groundwork to replace the current goals based on *quantity* of land with the goal of adding more uses to existing parks. The exact statement is P1.2 “Identify goals... that are realistic about quantity of land that could be acquired. And identify goals that drive improvements in the quality and usability of those spaces.” Obviously the answer to the impending open space shortage is to use the existing parks more. Add zip lines and bike trails to the natural areas. That won’t help the environment. With increases in impervious private land, and no increase in public open space, we can only expect dirtier air, a more polluted Puget Sound, and a much hotter city. Green space is still not being treated as a utility or city infrastructure, but as an amenity. In the proposed Comprehensive Plan the goal of becoming “an environmental leader” has morphed into the goal of being “realistic”.

“The lesson here is, ‘If at first you don’t succeed, give up and go do something else.’” —Homer Simpson

The proposed Comprehensive plan explains that getting more parkland is too difficult because all the land has been built upon. This is at the exact time it is recommending the city sell 35 park-like surplus substation properties (a \$9 million chunk of land), the Roy Street Shops in South Lake Union (a super dense Urban Village area with no access to greenspace), and Myers Parcels (32 acres of wooded hills, wetlands, and extremely rare, flat meadowland found in underserved south Seattle).

There is no shortage of land to become open space, just a shortage of funding to buy it and the will to do so.

“When you sell the land, it is the end.”
—Pearl S. Buck, *The Good Earth* ▲

PART TWO—Is Green Infrastructure Part of the Problem?



I THINK THEY'RE
LOOKING AT
THE TREE.

NO, I THINK THEY'RE
LOOKING AT
A ROBIN!

WHAT IS
A ROBIN?

THE LAST TREE IN BALLARD