

## Northern Limit of Palms in North America: Trachycarpus in Canada

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The growth range of cultivated *Trachycarpus fortunei* has been creeping northward along the Pacific coast for decades and has now reached British Columbia on Canada's west coast. Greater Vancouver and southern Vancouver Island are seeing a dramatic increase in the use of the Chinese windmill palm in both private gardens and commercial landscaping.

The rise in popularity and profile of the humble windmill palm is largely the result of efforts of dedicated individuals who have been quietly planting palms in private gardens for years and not so quietly promoting the notion that palms will actually grow in Canada adding a wonderful, exotic touch to west coast gardens. People in this part of the country take their gardening seriously. They are proud, even smug about the range and variety of plants and flowers that will grow here (and not in Toronto). Show them a 20 ft fan palm that will thrive with little winter care, and the appeal is irresistible.

It wasn't always this way. Any palms that were planted before the 1960s have long since fallen to the cold or the contractor's bulldozer. In Bremerton, Washington, 100 miles south of the border, the Taft St. palm was planted in 1939. It is regarded as one of the earliest plantings in the Seattle area and is now more than 30 ft high, probably the tallest palm north of California. Some of the earliest *T. fortunei* in British Columbia were planted in Beacon Hill Park in Victoria on Vancouver Island in the 1950s. The original trees are gone now, replaced with new ones. In Vancouver, a palm was planted in the zoo area of Stanley Park in 1967. The tallest palm on the British Columbian mainland was planted on Rumble St. in Burnaby in 1968. It is now 25 ft tall towering over an adjacent home (Fig. 1). Beyond these known plantings, however, there is very little historical evidence of interest in cultivating palms.

Things began to change when a young Swiss landscaper named Gerard Pury immigrated to

Canada and took up residence in Vancouver. Gerard came from Lugano, an area of Switzerland well known for the postcard windmill palms growing beside Lake Maggiore. Gerard felt confident palms would do well in Vancouver's similar climate. As a landscaper he had a unique opportunity to experiment in gardens around town (with or without the owner's blessing). As his landscaping business became more successful, his palms grew



1. Palm on Rumble St in Burnaby planted in 1968 is Vancouver's tallest. N. Parker photo June 1991.



2. Planted in 1975 on Point Grey Rd. in Vancouver's fashionable Kitsilano district, this is one of hundreds of windmill palms planted by Gerard Pury over the past 30 years. N. Parker photo Sept. 1993.

more impressive and were planted in increasingly more influential locations. In 1966 he planted a palm at his present address on Manitoba Street. Today seeds from this fecund tree produce noticeably hardier plants than the standard 5- and 10-gallon plants imported from California and sold in garden nurseries.

The Palm Society was established in Vancouver in 1984 by Richard Woo and a half dozen palm enthusiasts. The Society has grown steadily to become The Pacific Northwest Palm & Exotic Plant Society, a chapter of the International Palm Society, with about 100 members in British Columbia, Washington, and Oregon. Richard and Rudi Pinkowski, another stalwart, continue tirelessly to promote the use and enjoyment of palms in public and private gardens.

The southwestern corner of Canada is the mildest part of a very cold country. This is the banana belt of the nation, the southern California of Canada. Thousands of people move here each year to live or retire, Canadians from other parts of Canada escaping winter's icy grip, and immigrants

from all over the world for the peace and safety that Canada offers. Two-thirds of British Columbia's 3½ million people now crowd themselves into the southwest corner of the province.

Coastal British Columbia is USDA zone 8, and will periodically experience overnight winter temperatures of  $-7^{\circ}$  to  $-12^{\circ}$  C ( $10^{\circ}$  to  $20^{\circ}$  F). Away from the coastline temperatures on the coldest winter nights will occasionally drop below  $-12^{\circ}$  C ( $10^{\circ}$  F). The coldest temperature ever recorded in Vancouver was  $-18^{\circ}$  C ( $0^{\circ}$  F) on January 15, 1950 and again on December 29, 1968. Rainfall is approximately 50 inches annually. *Trachycarpus fortunei* is the only species that has proven hardy for this climate with its cool summers and mild, damp winters. Mature, acclimatized trees are not severely damaged by winter frosts but younger plants and seedlings usually require some form of protective covering from November through February. Even with protection the survival rate is only about 50–70% for young or newly planted trees that have not been hardened.

There have been no confirmed cases of natural



3. Successful test planting by Vancouver Parks Board on city streets in the West End. N. Parker photo Sept. 1993.

germination, although I have seen seedlings growing naturally beneath the Pury palm. I don't believe they survive without protection.

Other hardy palm species have been tested outdoors in coastal areas but none has proved to be as reliable as the Chusan palm. From time to time Northwest Chapter members report successful wintering but these are usually shortlived. The occasional *Chamaerops humilis* can be found, kept dry during cold weather. Cool, wet winters also disagree with the genus *Washingtonia*. *Rhapidophyllum hystrix* and *Sabal*, on the other hand, can withstand winter cold, but require more summer warmth to grow normally. *Phoenix canariensis*, *Butia capitata*, and *Jubaea chilensis* all have at least a theoretical chance of survival outdoors with some protection, but have not yet proven hardy enough to withstand the coldest winters. *Trachycarpus fortunei* is the only palm that grows to maturity in British Columbia.

In Vancouver the natural beauty of the mountains and the ocean draw thousands of visitors each year. Palms as a viable landscaping option for city streets are only slowly being considered

by those civic agencies responsible. Vancouver's famous Stanley Park has had two prominent palms in the zoo area for many years. Recently the Parks Board experimented with street palms in the West End near English Bay. In 1990 sixteen small trees were planted on a traffic island at Beach Ave and Pacific Blvd as a trial Three years later the test has proven to be a complete success. The palms have continued to grow unprotected through three winters, two of which were colder than normal, and have actually grown 2-4 ft in this time, faster than was expected (Fig. 3). Of the original 16 trees, one was stolen and one died of causes unrelated to weather. Needless to say, the Palm Society is delighted and is now urging the Parks Board to plant more palms in high traffic areas of English Bay and Stanley Park around Coal Harbour. This action is being resisted by some groups who wish to see only indigenous trees growing in Stanley Park. On Vancouver Island seventy kilometres north of Victoria near Nanaimo, authorities have planted six mature Trachys along a short stretch of highway; however, these trees are protected inside plywood frames during the winter months.



4. Summer flowers and palms with inflorescences all but consume a front yard garden at this home near Victoria. R. Pinkowski photo Aug. 1993.

*Trachycarpus fortunei* is not elegant by palm standards. In northern climes, trees are often misshaped, with weather-worn fronds tattered by wind and frost. Their “hairy” trunk is not what anyone would consider graceful. Nevertheless, many commercial landscapers and individual entrepreneurs also seem to have embraced it as a thing of beauty and are willing to risk their investment to exploit the palm’s new popularity. Mature palms are springing up around car lots, restaurants, and condominium developments. The \$500-and-up pricetag for trees with 4–6 ft trunk development and the risk of losing them all in the winter doesn’t seem to be a consideration.

Vancouver and Victoria are a long way from palm-lined boulevards, Los Angeles-style. Most

people here are still unaware that palms will grow in their climate and greet the news with skeptical amusement. But this is definitely changing.

The furthest north that palms have been confirmed sighted growing outdoors unprotected in British Columbia is at Savary Island near 50°N between Vancouver Island and the mainland. I have been told palms are growing further north on Quadra Island at 50°12’N, however, this sighting is unconfirmed. The British Columbian coastline as far north as the Queen Charlotte Islands is considered to be USDA zone 8. It is reasonable, therefore, to conclude that *T. fortunei* has not yet reached the northern limits of its growth in cultivation.