

What is a Maritime Climate?

Gardeners rarely thank the weather. It seems there is always something to complain about: it's too cold or too hot, too wet or too dry. In the Maritime Northwest, the climate brings steady, moist and mild weather that can drive even the most casual sun worshipper to distraction.

Nonetheless, we should remember to thank the giant Pacific Ocean for providing a climate that is fairly even the whole year round. The sheer size of the ocean causes solar warmth to be slowly accumulated and slowly released, moderating the temperature changes through the seasons. The winds from the ocean bring moderately cool, moist air across the Northwest in winter and summer months. The geographic areas most affected by an onshore flow of mild marine air are said to have a maritime climate.

The topography of the Northwest also defines the maritime climate. The Cascade mountains protect and insulate the Pacific coast from inland weather patterns. Maritime Northwest weather results from the complex interactions of onshore weather and continental or inland weather. For example, the very cold weather of midwinter often flows over the Cascades or through the Columbia Gorge and meets wet clouds in the west—this often results in snow or, along the gorge, ice storms.

Our cool but moderate springs seem to last well into June, and long drawn-out cool fall weather often starts in late August and remains mild into November. This makes first and last frost dates unpredictable. Therefore, when planting out or sowing, it's more important to focus on soil temperature, which more accurately defines the growing and harvesting seasons of the Maritime Northwest. Although we may not be experiencing frost, our cool night temperatures in the spring and fall make it especially important to have adequate soil warmth for less hardy plant varieties. A soil thermometer is especially useful when the seasons are changing.

Most of the sowing dates in this guide correspond to an approximate time when the temperature and light conditions are appropriate for each crop (in the Puget Sound Basin). In developing this guide, numerous sources were queried and years of sowing information compiled from the Seattle Tilth gardens and Maritime Northwest gardeners. However, the weather can never be accurately predicted and exact sowing dates can change considerably from year to year.

To make sowing predictions a little easier, the Maritime Northwest can be divided into zones that provide more specific information about what each area can expect when onshore weather and continental or inland weather interact. Gardeners can use this information to adjust planting dates for their microclimate.

Map Key and Zone Descriptions

The letters designating different zones are only for the purposes of a map key. The map takes into consideration first and last frost dates, heat units accumulated throughout the growing season and annual rainfall. It is impossible to give perfectly accurate definitions of the zones; anyone living close to a boundary will experience attributes of both zones. Other influences can create microclimate environments within the zones that can cause variations of 5° to 7° F.

We hope these zones will help gardeners develop a better understanding of their microclimates. Seattle Tilth wishes to thank Raintree Nursery for permission to use the map, and the late Don Shakow for defining the zones and developing the map.

ZONE A: THE MOUNTAIN RANGES

If you are already actively vegetable gardening in this mountain area, more power to you. The truly frost-free season is nonexistent; any day of the year can bring frost, though the summers can be quite pleasant. Vegetables outside during the summer growing season need to be hardy and able to survive cold nights. Choose vegetables listed in this guide for early spring and fall sowing, but start them in May or June for harvest in September. Winter gardening is, of course, left to the resourceful.

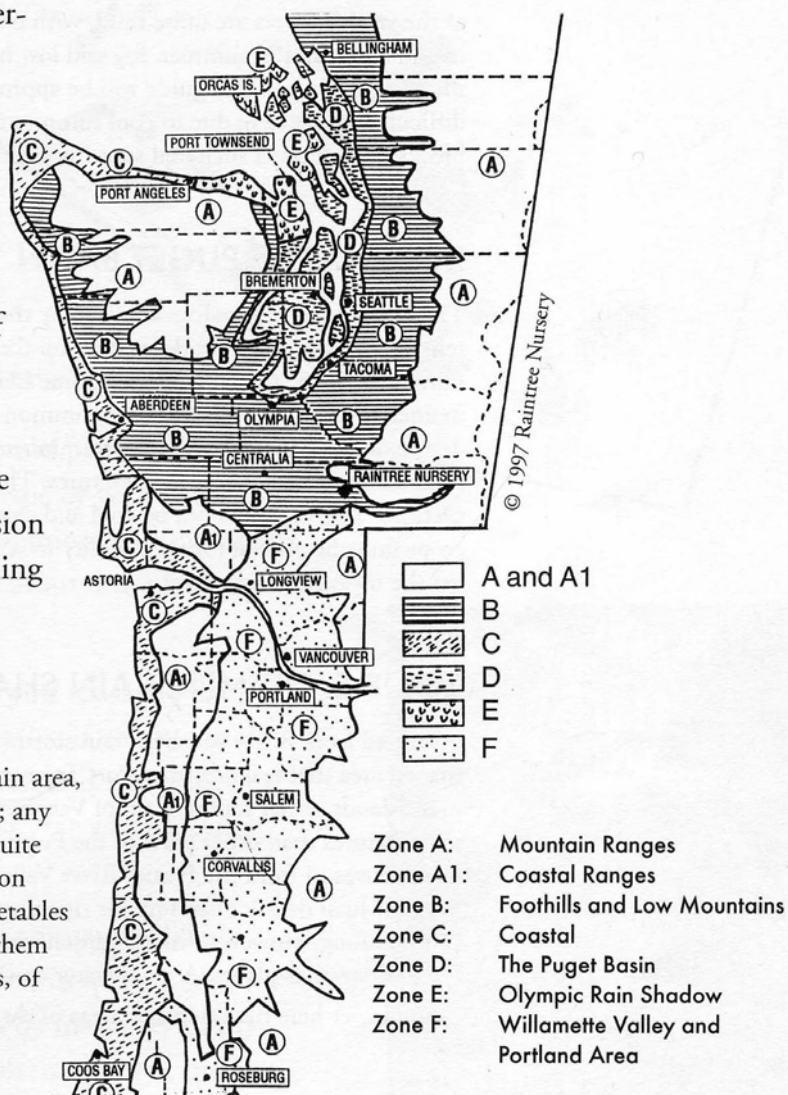
ZONE A1: THE COASTAL RANGE

The low mountains of the coastal range experience a bit of a moderating influence from the ocean, so winters are not as cold as in the inland heights. The summers in general are cool, so typical summer fruits are difficult to grow outside without the protection of a cloche or cold frame. The more difficult peppers and eggplants probably should be left to the adventurous. When choosing vegetables, look to hardy and half-hardy varieties, saving the sub-tropical for a novelty. Winter gardening can be dicey unless you have a favorable mini-micro-climate and protect plants with mulches, cloches or cold frames.

ZONE B: FOOTHILLS AND LOW MOUNTAINS

This area experiences a blending effect of the moderating air of the Puget Sound and the ocean with a strong mountain influence. The rain clouds frequently back up against the mountains, resulting in twice as much annual rainfall as in the lowlands. Cold frost often moves through the Frasier River

MARITIME NORTHWEST CLIMATE MAP



Valley (in British Columbia) and other mountain valleys to cause extreme winter lows. Last frost dates are around mid-May to June, with the first frost occurring in early October. The approximate sowing dates in this guide will be most useful if you sow two to three weeks later in the spring, and two to three weeks earlier in the summer and fall. Winter minimum temperatures are often in the teens and below, so winter gardening works well if plants are given adequate protection with mulches, cloches and cold frames.

ZONE C: COASTAL

This is a weatherperson's dream climate: It's a good bet that it will be raining and in the '50s most days of the year. Winters are quite mild, with minimum temperatures generally a few degrees higher than inland areas, and in summer, fog and low heat make this area a salad green grower's paradise. Most of the sowing dates in this guide will be appropriate for the coast, although summer vegetables can be difficult to grow here due to cool summer nights. Strong winds make it important to create wind breaks or seek out a sheltered spot for your garden.

ZONE D: THE PUGET BASIN

This is a blessed microclimate kissed by the salt water winds of Puget Sound. Minimum winter temperatures vary widely depending on the proximity of your garden to the salt water. The average minimum is 15° to 20° F, though some island locales have an average low temperature 5° F higher than mainland areas. Frost pockets are common in the small valleys of this undulating landscape. Population density and pavement have created mini-microclimates throughout much of the basin, slightly raising both summer and winter temperatures. The frost-free period begins around April 15 and ends around Oct. 31. The summers can be cool and cloudy, though sunnier than coastal areas. Heat-loving summer crops must be chosen for their ability to withstand cool nights, and should be situated where they can get the most sun and warmth.

ZONE E: OLYMPIC RAIN SHADOW

Protected from heavy southern rain storms by the Olympic Mountains, the rain shadow is a crescent-shaped area that extends from Port Townsend/Port Angeles across upper Whidbey Island and the San Juan Islands to the southern tip of Vancouver Island. On average, this zone experiences warmer winter temperatures than other parts of the Puget Basin. However, very low temperatures can occur if a cold front moves in from the Fraser River Valley. Cool, foggy summers with winds blasting in from the Strait of Juan de Fuca can impede ripening of summer fruit. Tender vegetables benefit from a cloche all summer long. However, winter gardens are at their best in this region, as it has a long growing season for cool-weather plants. A good water conservation program is important because rainfall is significantly lower here than in other areas of the Maritime Northwest.

ZONE F: WILLAMETTE VALLEY AND PORTLAND AREA

This zone has complex weather variations. Due to its slightly inland location it has a greater fluctuation of temperatures from winter to summer. In general, the summers here are the warmest of the Maritime Northwest, especially around Corvallis and along the Umpqua River. Most summer fruits grow well if attention is paid to appropriate varieties. In the depths of winter, valley cold pockets regularly experience temperatures below 15° F for extended periods of time. When this is the case, overwintered vegetables need the protection of a cloche or mulch.

In hilly districts, two kinds of mini-microclimates are frequently found: frost pockets in the valleys and protected south facing slopes that warm well during the growing season. As the valleys slope up to the foothills, the severity of cold weather increases and the growing season is shortened. For this zone, estimate approximate sowing dates two weeks earlier in the spring and two weeks later in the summer and fall than indicated in this guide. This is particularly true when planting out summer fruit crops.—CE