What Makes Oregon So Special?

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Director of Sales & Education, REX HILL/A to Z Wineworks
WINEGROWING THROUGHOUT OREGON

While Oregon's vineyards are concentrated in the northern Willamette Valley, other growing regions continue to gain prominence.

- **North Willamette Valley**: 57.6%
- **Columbia Gorge, Walla Walla & Other Border Regions**: 9.9%
- **South Willamette Valley**: 10.0%
- **Umpqua Valley**: 6.6%
- **Rogue Valley**: 15.5%

28,034 acres (11,345 ha.) planted to vine

Source: 2015 Oregon Vineyard and Winery Census Report
OREGON'S TOP VARIETIES

Pinot noir is the predominant variety grown in Oregon; however, the state's diversity of geography and microclimates make it well-suited to many different varieties.

72 varieties of wine grapes are grown in Oregon.

Source: 2015 Oregon Vineyard and Winery Census Report
SETTING THE SCENE

Oregon resides in the “Ring of Fire,” an area in the basin of the Pacific Ocean that is home to 75% of the world's volcanoes and 90% of the world's earthquakes.
200 MILLION YEARS AGO

PACIFIC OCEAN COAST REACHES IDAHO

- The Juan de Fuca tectonic plate begins to gradually subduct under the North American tectonic plate.

- Ocean islands and pieces of the ocean bottom are "stuck" onto the West Coast as accreted terrane, creating Oregon's oldest mountains and gradually adding land mass to what is now Oregon.
16-14 MILLION YEARS AGO

VOLCANOES CREATE COLUMBIA RIVER BASALT

- Multiple fissures create one of the largest volcanic events on earth between 17 and 6 million years ago, with 80% of activity occurring 16-14 million years ago.

- Lava flows travel throughout northern Oregon.

- Creates basalt bedrock in the Walla Walla Valley, Columbia Gorge and Willamette Valley winegrowing regions.
100,000-50,000 YEARS AGO

WIND BLOWS SILT FROM FLOOD PLAINS ONTO SURROUNDING SLOPES

- Ice Age creates a combination of weathered soil composed of rock ground down by glaciers
- This weathered soil, called loess, is fed into the streams and then blown onto the hillsides, especially at the northern end of the Willamette Valley
18,000-15,000 YEARS AGO

MISSOULA FLOODS

2,000 foot (600 m) high ice dam breaks 40+ times (about once every 50 years), causing a 300+ foot (90 m) wall of water that:

- Deepens and widens the Columbia Gorge
- Floods the Willamette and Columbia Valleys
- Deposits nutrient-rich loam on the Willamette Valley floor
Burlingame Canyon in Walla Walla: 32 Layers = 32 Floods
Volcanic, Loess, Marine Sedimentary Soils

Image courtesy of Harry Peterson Nedry, Chehalem Winery
What makes Oregon so special?
Deep Soil Horizons

Image courtesy of Harry Peterson-Nedry, Chehalem Winery
Winegrowing regions can be divided into four climate types, based on growing season temperatures. Oregon's growing regions can all be classified as Cool or Intermediate.

### Average Growing Season Temperature °F (°C)

<table>
<thead>
<tr>
<th>Climate</th>
<th>Range</th>
<th>Fahrenheit</th>
<th>Celsius</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cool</td>
<td>55-59</td>
<td>13-15</td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td>59-63</td>
<td>15-17</td>
<td></td>
</tr>
<tr>
<td>Warm</td>
<td>63-67</td>
<td>17-19</td>
<td></td>
</tr>
<tr>
<td>Hot</td>
<td>67-72</td>
<td>19-22</td>
<td></td>
</tr>
</tbody>
</table>

The ideal winegrowing climate allows grapes to achieve optimum sugar and acid levels naturally timed with flavor and tannin development to maximize a given style of wine and express vintage qualities.

- DR. GREG JONES
Professor of Environmental Science and Policy at Southern Oregon University
Oregon's warm days during the growing season are tempered by significantly cooler nights – the diurnal temperature swing is often 30-40 °F (16.5-22 °C). This preserves the grapes' acidity, developing complex, balanced wines.
Macroclimate

AVERAGE GROWING SEASON TEMPERATURES (APRIL-OCTOBER)

COOL 55-59 °F
- Pinot Gris
- Riesling
- Pinot Noir
- Chardonnay
- Sauvignon Blanc

INTERMEDIATE 60-63 °F
- Cabernet Franc
- Merlot
- Viognier
- Syrah
- Cabernet Sauvignon
- Sangiovese
- Zinfandel
- Nebbiolo

WARM 63-67 °F

HOT 67-72 °F

by Dr. Gregory Jones, University of Southern Oregon

Source: Wine Folly
SUNSHINE

A region's latitude is the main factor in the amount of sunshine it receives during the growing season. Oregon is located within the 30-50° band of prime grapegrowing latitudes, at a northerly 42-46° N.
SUNSHINE IN OREGON

Oregon's relatively northern locale gives it long summer days with more than 15 hours of daylight. In a cooler growing region, this extended daylight is necessary to achieve full ripeness of the grapes.
WIND IN OREGON

Oregon has two primary wind sources: the Pacific Ocean and the Columbia Gorge. Four major geological landforms influence the intensity of wind that reaches the winegrowing regions.

- **COLUMBIA RIVER GORGE**
  During the growing season, cool, sustained winds from the Pacific Ocean blow east.

- **COAST RANGE AND SISKIYOU MOUNTAINS**
  Protect growing regions from intense wind blowing off the Pacific Ocean.

- **CHEHALEM MOUNTAINS**
  Offer protection from the winds blowing down from the Columbia Gorge.

- **VAN DUZER CORRIDOR**
  Break in Coast Range allows a moderate cooling wind to reach McMinnville and Eola-Amity Hills.
RAINFALL IN OREGON

Oregon has a reputation for being rainy, but even in the rainiest areas, precipitation is concentrated into the winter months – the growing seasons are typically dry. This ensures sufficient grapevine water stress during growing seasons.
OREGON WINEMAKERS FIERCELY PROTECT THE INTEGRITY OF THEIR LAND, THEIR WAY OF LIFE AND THEIR WINE.

In 1977, Oregon winemakers joined together to adopt stricter regulations than required federally by the TTB.
PLACE OF ORIGIN LABELING REGULATIONS

EVERY OREGON WINEGROWING REGION IS DISTINCT FROM ITS NEIGHBORS.

To preserve identity and create transparency, origin labeling is stricter in Oregon.

<table>
<thead>
<tr>
<th></th>
<th>FEDERAL (TTB)</th>
<th>OREGON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declaration of Country, State or County</td>
<td>75% of grapes must be from place named</td>
<td>100% of grapes must be from Oregon</td>
</tr>
<tr>
<td>Declaration of American Viticulture Area (AVA)</td>
<td>85% of grapes must be from AVA named</td>
<td>95% of grapes must be from AVA named</td>
</tr>
</tbody>
</table>
VARIETAL DECLARATION

OREGON SETS THE BAR HIGHER FOR QUALITY AND PURER VARIETAL EXPRESSION.

In Oregon, at least 90% of a wine must be made from the variety named on the label.

The 90% rule applies to Pinot noir, Pinot gris, Chardonnay, Pinot blanc and more than 50 other varieties grown in Oregon.
A COMMITMENT TO QUALITY

The attention and care given by Oregon's grapegrowers and winemakers from vine to bottle are reflected in their consistently high-quality wines.

1%  Oregon's share of domestic wine production

20%  Oregon's share of Wine Spectator's 90+ scores on domestic wine in 2015 and 2016

Sources: Wines and Vines, July 2016/Wine Spectator, February 2016 and 2017
OREGON’S ONGOING COMMITMENT TO SUSTAINABILITY

47% of Oregon vineyards are certified sustainable, more than any other state in the U.S.

Standards of the following agencies have been adopted by many Oregon vineyards and wineries:

B Corporation
Deep Roots Coalition
Demeter Biodynamic
LIVE
Salmon-Safe
USDA Organic / Oregon Tilth
If Oregon is green, the Oregon wine industry is the glowing chartreuse of a vineyard in springtime.

- KATHERINE COLE

Voodoo Vintners: Oregon's Astonishing Biodynamic Winegrowers
A DRIVING FORCE FOR GOOD

As the Oregon wine industry grows, so does its impact on the economy and ability to give back to the community.

- **$3.35 B** Statewide economic impact
- **17.1 K** Wine-related jobs in Oregon
- **$11 M** Charitable donations made by Oregon wine businesses
- **$208 M** Wine-related tourism revenue
- **$527 M** Wages related to Oregon wine jobs

Oregon’s modern winemaking era recently passed the half century mark, and it’s really just in the past two decades that its industry growth has accelerated... Oregon’s grape growers and vintners have accomplished near miracles in a very short time.

- PAUL GREGUTT
Wine Enthusiast

January 2016
What’s Next?

- Biodynamic Farming expands
- Climate Change pushes development of new rootstocks, pruning and trellising techniques
- Mechanization for hillside farming progresses
- Better designation and ranking of sites, AVAs
Jacob-Hart Estate Vineyard
Chehalem Mountains AVA

Pinot Noir clones: Pommard, Wadensville, 115, 667, 777, Mariafeld

Chardonnay clones: 76, 95, 96, 548, Wente, Mt Eden

Elevation: 300-430’

Soils: Basalt & Sedimentary base, 13 strata

Aspect: South, South East, South west, West, North

Plant density: 1089 vines per acre


Certification: LIVE, Organic and Biodynamic