

Washington Invasive Ranking System

Washington Natural Heritage Program

Quercus robur (English Oak)

Assessed by

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Ecological Impact Rank: **Low (50)**

Confidence: **High (83)**

Management Difficulty Rank: Insignificant (16)

Confidence: High (100)

Biological Characteristics of Invasiveness: Low (37)

Confidence: Moderate (67)

Concern Related to Distribution and Abundance: Moderate (56)

Confidence: High (70)



Photo Credit: Nancy Janz 2024, used under Creative Commons license (iNaturalist Community, 2024).

Ranking Notes

Rapid assessment only, based primarily on professional expertise.

Legal Listings

Washington State Weed Board: No

Washington Invasive Species Council: No

Section 1: Distribution and Abundance

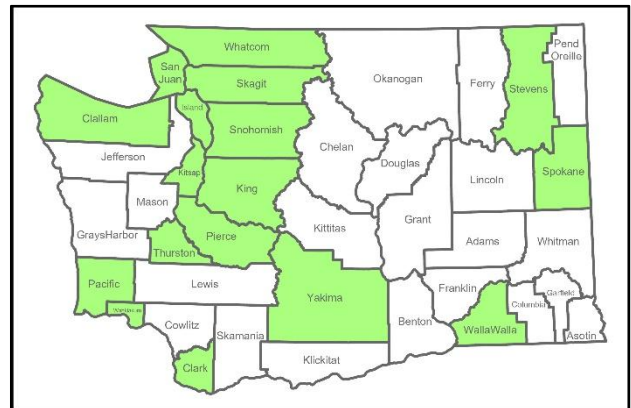


Figure 1. Distribution of counties where *Quercus robur* has been documented in Washington State (CPNWH, 2024; EDDMapS, 2024; iNaturalist Community, 2024).

Q1: Current Range Size in Washington

Rating: Moderate

Confidence: High

Quercus robur is documented in 44% of counties in Washington (CPNWH, 2024; EDDMapS, 2024; iNaturalist Community, 2024).

Source: Professional expertise, Herbarium records and other observations

Q2: Current Trend in Total Range

Rating: Moderate

Confidence: Moderate

Source: Professional expertise

Q3: Proportion of Potential Range Currently Unoccupied

Rating: Moderate

Confidence: Moderate

Source: Professional expertise

Q4: Local Range Expansion or Change in Abundance

Rating: Low

Confidence: Moderate

Source: Professional expertise

Q5: Diversity of Ecosystems Invaded

Ecosystem types: Forest & Woodland, Grassland & Shrubland

Rating: Low

Confidence: High

Source: Professional expertise

Section 2: Biological Characteristics

Q6: Aggressive Mode of Reproduction

Rating: No

Confidence: Moderate

Source: Professional expertise

Q7: Innate Potential for Long-Distance Dispersal

Rating: Yes

Confidence: High

Birds and squirrels can disperse the acorns.

Source: Professional expertise

Q8: Potential to be Spread by Human Activities

Rating: Yes

Confidence: High

Some people may mistake this species for a native oak (*Quercus garryana*) and plant it thinking it is native.

Source: Professional expertise

Q9: Allelopathy

Rating: No

Confidence: High

Source: Professional expertise

Q10: Competitive for Limiting Abiotic Factors

Rating: No

Confidence: Moderate

Source: Professional expertise

Q11: Growth Form

Rating: Yes

Confidence: Moderate

Trees can grow quite large.

Source: Professional expertise

Q12: Germination Requirements

Rating: Yes

Confidence: Moderate

Source: Professional expertise

Q13: Invasiveness of Other Plants in Genus

Rating: No

Confidence: Low

Quercus rubra is also established in Washington, but generally not considered invasive. *Quercus acutissima* (native to Asia) is common in the southeast, but there appears to be little consensus regarding its invasiveness (Center for Invasive Species and Ecosystem Health, 2018; Kling, 2024). Non-native oaks are most likely to be invasive in areas where native oak woodlands or oak-prominent forests are more common.

Source: Professional expertise, Informal publication

Q14: Shade Tolerance

Rating: Low/Insignificant

Confidence: High

Source: Professional expertise

Q15: Disturbance Tolerance

Rating: No

Confidence: Low

Quercus robur is a fast-growing pioneer species, but plants in Washington have not demonstrated a competitive advantage gained from any potential disturbance tolerance.

Source: Professional expertise

Q16: Propagule Persistence

Rating: <5 years

Confidence: High

Source: Professional expertise

Q17: Palatability

Rating: No, plant is palatable

Confidence: High

Source: Professional expertise

Section 3: Ecological Impact

Q18: Impact on Ecosystem Abiotic Processes

Abiotic Processes: Light availability

Rating: Low

Confidence: Moderate

Source: Professional expertise

Q19: Impact on Ecosystem Structure

Rating: High

Confidence: High

In some cases, this species could have significant effects on ecosystem structure.

Source: Professional expertise

Q20: Impact on Ecosystem Composition

Rating: Low

Confidence: Moderate

Source: Professional expertise

Q21: Impact on Particular Native Species

Rating: Insignificant

Confidence: High

Source: Professional expertise

Q22: Observed Ability to Invade Undisturbed Ecosystems

Rating: Low

Confidence: High

Generally spreads into undisturbed ecosystems via birds and squirrels.

Source: Professional expertise

Q23: Observed Ability to Invade Naturally Disturbed Ecosystems

Rating: Yes

Confidence: High

Source: Professional expertise

Section 4: Management Difficulty

Q24: General Management Difficulty

Rating: Low

Confidence: High

Source: Professional expertise

Q25: Minimum Time Commitment

Rating: Insignificant

Confidence: High

Source: Professional expertise

Q26: Impacts of Management on Native Species

Rating: Insignificant



Confidence: High

Source: Professional expertise

Q27: Inaccessibility of Invaded Areas

Rating: Insignificant

Confidence: High

Source: Professional expertise

Q28: Sociopolitical Implications of Management

Rating: Moderate/Low

Confidence: High

The general public may not be able to distinguish native from introduced oaks.

Source: Professional expertise

Additional Comments

None

References

Center for Invasive Species and Ecosystem Health. 2018. Sawtooth Oak, *Quercus acutissima* Carruthers. Invasive Plant Atlas of the United States. <https://www.invasiveplantatlas.org/subject.cfm?sub=10086>. Accessed: February 6, 2025.

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