

Washington Invasive Ranking System

Washington Natural Heritage Program

Betula pendula (European White Birch)

Assessed by

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Ecological Impact Rank: **Low** (38)

Confidence: **Moderate** (50)

Management Difficulty Rank: Insignificant (26)

Confidence: High (70)

Biological Characteristics of Invasiveness: Moderate (62)

Confidence: Moderate (58)

Concern Related to Distribution and Abundance: High (76)

Confidence: High (80)



Photo Credit: Jean Pawek 2020, used under Creative Commons license (CalPhotos, 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

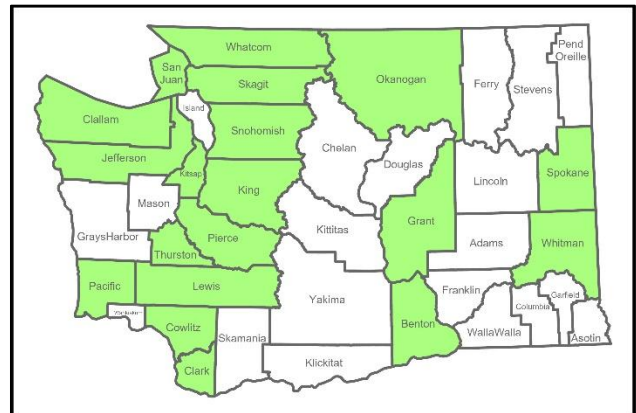


Figure 1. Distribution of counties where *Betula pendula* has been documented in Washington State (CPNWH, 2023; EDDMapS, 2023; iNaturalist Contributors, 2023).

Q1: Current Range Size in Washington

Rating: Moderate

Confidence: High

Betula pendula is found in 49% of counties in Washington (CPNWH, 2023; EDDMapS, 2023; iNaturalist Contributors, 2023).

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: Low

Confidence: Moderate

Source: Professional expertise

Q4: Local Range Expansion or Change in Abundance

Rating: High

Confidence: High

Source: Professional expertise

Q5: Diversity of Ecosystems Invaded

Ecosystem types: Forest & Woodland, Grassland & Shrubland, Forested Wetland, Bog & Fen, Emergent Open Wetland

Rating: High

Confidence: High

Source: Professional expertise

Section 2: Biological Characteristics

Q6: Aggressive Mode of Reproduction

Rating: Yes

Confidence: High

Seeds are very numerous, and a mature birch can produce over a million seeds per year (Vedel & Lange, 1960).

Source: Book

Q7: Innate Potential for Long-Distance Dispersal

Rating: Yes

Confidence: High

Seeds are wind dispersed.

Source: Professional expertise

Q8: Potential to be Spread by Human Activities

Rating: Yes

Confidence: High

Source: Professional expertise

Q9: Allelopathy

Rating: Unknown

Confidence: Not Rated

Source:

Q10: Competitive for Limiting Abiotic Factors

Rating: Yes

Confidence: Moderate

Source: Professional expertise

Q11: Growth Form

Rating: No

Confidence: Moderate

Source: Professional expertise

Q12: Germination Requirements

Rating: No

Confidence: Moderate

Source: Professional expertise

Q13: Invasiveness of Other Plants in Genus

Rating: No

Confidence: Moderate

Source: Professional expertise

Q14: Shade Tolerance

Rating: Moderate

Confidence: Moderate

Source: Professional expertise

Q15: Disturbance Tolerance

Rating: Yes

Confidence: Moderate

Source: Professional expertise

Q16: Propagule Persistence

Rating: Unknown

Confidence: Not Rated

Source:

Q17: Palatability

Rating: No, plant is palatable

Confidence: Moderate

Source: Professional expertise

Section 3: Ecological Impact

Q18: Impact on Ecosystem Abiotic Processes

Abiotic Processes: Hydrology, Light availability

Rating: Low

Confidence: Moderate

Source: Professional expertise

Q19: Impact on Ecosystem Structure

Rating: Low

Confidence: Moderate

Source: Professional expertise

Q20: Impact on Ecosystem Composition

Rating: Low

Confidence: Moderate

Source: Professional expertise

Q21: Impact on Particular Native Species

Rating: Unknown

Confidence: Not Rated

Source:

Q22: Observed Ability to Invade Undisturbed Ecosystems

Rating: Low

Confidence: High

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: Low

Confidence: Moderate

Source: Professional expertise

Q26: Impacts of Management on Native Species

Rating: Insignificant

Confidence: High

Source: Professional expertise

Q27: Inaccessibility of Invaded Areas

Rating: Low

Confidence: Moderate

Source: Professional expertise

Q28: Sociopolitical Implications of Management

Rating: Moderate/Low

Confidence: Moderate

Source: Professional expertise



Additional Comments

Betula pendula is mostly an issue in disturbed areas, but populations appear to be growing rapidly.

References

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